Connecting via Winsock to STN

Welcome to STN International! Enter x:x

```
LOGINID:ssptaeal1624
PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2
* * * * * * * * *
                     Welcome to STN International
                 Web Page for STN Seminar Schedule - N. America
NEWS
NEWS
         JAN 02
                 STN pricing information for 2008 now available
NEWS 3
         JAN 16
                 CAS patent coverage enhanced to include exemplified
                 prophetic substances
         JAN 28
                 USPATFULL, USPAT2, and USPATOLD enhanced with new
NEWS 4
                 custom IPC display formats
NEWS 5
         JAN 28
                 MARPAT searching enhanced
                 USGENE now provides USPTO sequence data within 3 days
NEWS 6 JAN 28
                 of publication
NEWS 7 JAN 28 TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 8 JAN 28 MEDLINE and LMEDLINE reloaded with enhancements
NEWS 9 FEB 08 STN Express, Version 8.3, now available
NEWS 10 FEB 20 PCI now available as a replacement to DPCI
NEWS 11 FEB 25 IFIREF reloaded with enhancements
NEWS 12 FEB 25 IMSPRODUCT reloaded with enhancements
NEWS 13 FEB 29 WPINDEX/WPIDS/WPIX enhanced with ECLA and current
                 U.S. National Patent Classification
NEWS 14 MAR 31
                 IFICDB, IFIPAT, and IFIUDB enhanced with new custom
                 IPC display formats
NEWS 15
         MAR 31 CAS REGISTRY enhanced with additional experimental
                 spectra
NEWS 16 MAR 31
                 CA/CAplus and CASREACT patent number format for U.S.
                 applications updated
NEWS 17 MAR 31 LPCI now available as a replacement to LDPCI
NEWS 18 MAR 31 EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 19 APR 04
                 STN AnaVist, Version 1, to be discontinued
NEWS 20 APR 15 WPIDS, WPINDEX, and WPIX enhanced with new
                 predefined hit display formats
                 EMBASE Controlled Term thesaurus enhanced
NEWS 21 APR 28
NEWS 22 APR 28 IMSRESEARCH reloaded with enhancements
NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,
             AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008
NEWS HOURS
              STN Operating Hours Plus Help Desk Availability
NEWS LOGIN
              Welcome Banner and News Items
              For general information regarding STN implementation of IPC 8
Enter NEWS followed by the item number or name to see news on that
```

<12/04/2007> Erich Leese

specific topic.

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FILE 'HOME' ENTERED AT 14:31:08 ON 27 MAY 2008

=> file reg
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FILE 'REGISTRY' ENTERED AT 14:31:16 ON 27 MAY 2008
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http://www.cas.org/support/stngen/stndoc/properties.html

Uploading C:\Program Files\Stnexp\Queries\10550641Ex222.str

chain nodes :
22 23 24 26 27 28 29 31 32 33 34 35 36 37 38 39 40
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
1-35 2-34 3-33 4-32 5-8 6-36 7-31 12-15 13-28 14-29 17-22 22-23 22-24
24-26 24-27 36-37 37-38 37-39 37-40
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18
exact/norm bonds :
1-35 2-34 3-33 4-32 6-36 7-31 13-28 14-29 22-23 22-24 24-26 24-27 36-37

exact bonds:
5-8 12-15 17-22 37-38 37-39 37-40
normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18
14-15 15-16 16-17 17-18
isolated ring systems:
containing 1: 7: 13:

G1:C,N

G2:C,H

# Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 22:CLASS 23:CLASS 24:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 31:CLASS 32:CLASS 33:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS

## L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS L1 STR

G1 C, N G2 C, H

Structure attributes must be viewed using STN Express query preparation.

=> s 11 full

FULL SEARCH INITIATED 14:31:40 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 177 TO ITERATE

100.0% PROCESSED 177 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L2 1 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
178.36
178.57

FILE 'CAPLUS' ENTERED AT 14:31:44 ON 27 MAY 2008
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=> s 12 full L3 1 L2

=> d ibib abs hitstr

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA:	CENT	ΝΟ.			KIND		DATE		APPI	JICAT	DATE								
	2004				2004			WO 2	2004-		20040319								
WO	2004084824				A3		20050331												
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
							LV,												
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:						MW,						•						
							TJ,												
							HU,												
							CG,												
		TD,		,	•	•	•	,	,	,	,	~,	,	,	,	,	,		
AU	2004	2243	92		A1		2004	1007		AU 2	2004-	2243	92		20040319				
CA	2519	677			A1		2004	1007		CA 2	2004-	2519		20040319					
EP	1608	622								EP 2	2004-		20040319						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
							RO,	•			•	•							
CN	1791				A				CN 2004-80013599										
JP	JP 2006521357						2006	0921		JP 2	2006-	5073	95		2	0040	319		
	IN 2005DN04098							0831		IN 2	2005-	DN40	98		2	0050	912		
	US 20060293339															0050			
	RIORITY APPLN. INFO.:										2003-					0030	324		
										WO 2	2004-	US85	32		A 2	0040	319		
OTHER SO	DURCE	(S):			MAR:	PAT	141:	3322											

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770725-39-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

Erich Leese

RN 770725-39-8 CAPLUS

CN [4,4'-Bipyrimidine]-2-carboxamide, 6'-[2-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

<12/04/2007>

=> file reg COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 12.65 191.22

FULL ESTIMATED COST

CA SUBSCRIBER PRICE

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY

-0.80-0.80

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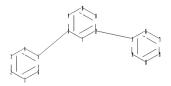
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ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds : 5-8 12-15

ring bonds :

 $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18$ 

14-15 15-16 16-17 17-18

exact/norm bonds :

5-8 7-8 7-12 8-9 9-10 10-11 11-12 12-15 13-14 13-18 14-15 15-16 16-17

17-18

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6

isolated ring systems :
containing 1 : 7 : 13 :

G1:C, N

G2:C,H

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

L4 STRUCTURE UPLOADED

=> d 14

L4 HAS NO ANSWERS

L4 STR

G1 C, N G2 C, H

Structure attributes must be viewed using STN Express query preparation.

=> s 14 full

FULL SEARCH INITIATED 14:40:57 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2127961 TO ITERATE

47.0% PROCESSED 1000000 ITERATIONS INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

18557 ANSWERS

SEARCH TIME: 00.00.08

FULL FILE PROJECTIONS: ONLINE \*\*INCOMPLETE\*\*

BATCH \*\*INCOMPLETE\*\*

PROJECTED ITERATIONS: 2127961 TO 2127961 PROJECTED ANSWERS: 38892 TO 40084

L5 18557 SEA SSS FUL L4

=> file caplus

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 178.36 369.58

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

CA SUBSCRIBER PRICE

0.00 -0.80

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=> s 15 full L6 2451 L5

=> file reg

TOTAL COST IN U.S. DOLLARS SINCE FILE ENTRY SESSION FULL ESTIMATED COST 4.80 374.38 TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -0.80

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

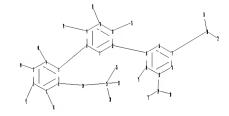
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http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10550641claim43.str



```
chain nodes :
24 25 26 27 28 29 30 31 32 33 34 35 36 38 39
                                                                                      40
                                                                                            41 42
ring nodes :
1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17 \quad 18
chain bonds :
1-43 \quad 2-42 \quad 3-41 \quad 4-40 \quad 5-8 \quad 6-24 \quad 9-39 \quad 10-38 \quad 11-36 \quad 12-15 \quad 13-29 \quad 14-35 \quad 17-30
24-25 25-26 25-27 25-28 29-33 29-34 30-31 30-32
ring bonds :
1 - 2 \quad 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 5 - 6 \quad 7 - 8 \quad 7 - 12 \quad 8 - 9 \quad 9 - 10 \quad 10 - 11 \quad 11 - 12 \quad 13 - 14 \quad 13 - 18
14-15 15-16 16-17 17-18
exact/norm bonds :
1 - 43 \quad 2 - 42 \quad 3 - 41 \quad 4 - 40 \quad 6 - 24 \quad 9 - 39 \quad 10 - 38 \quad 11 - 36 \quad 13 - 29 \quad 14 - 35 \quad 17 - 30 \quad 24 - 25 \quad 29 - 33
 29-34 30-31 30-32
exact bonds :
5-8 12-15 25-26 25-27 25-28
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18
14-15 15-16 16-17 17-18
isolated ring systems :
containing 1:7:13:
```

G1:C, N

G2:C,H

## Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 38:CLASS 39:CLASS 40:CLASS 41:CLASS 42:CLASS 43:CLASS

## L7 STRUCTURE UPLOADED

=> d 17 L7 HAS NO ANSWERS L7 STR

G1 C, N G2 C, H

Structure attributes must be viewed using STN Express query preparation.

=> s 17 full

FULL SEARCH INITIATED 14:47:16 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 42 TO ITERATE

100.0% PROCESSED 42 ITERATIONS 1 ANSWERS

SEARCH TIME: 00.00.01

L8 1 SEA SSS FUL L7

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 178.36 FULL ESTIMATED COST 552.74 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL SESSION ENTRY CA SUBSCRIBER PRICE 0.00 -0.80

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=> s 18 full L9 1 L8

=> d ibib abs hitstr

L9 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA:	CENT	ΝΟ.			KIND		DATE		APPI	JICAT	DATE								
	2004				2004			WO 2	2004-		20040319								
WO	2004084824				A3		20050331												
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
							LV,												
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:						MW,						•						
							TJ,												
							HU,												
							CG,												
		TD,		,	•	•	•	,	,	,	,	~,	,	,	,	,	,		
AU	2004	2243	92		A1		2004	1007		AU 2	2004-	2243	92		20040319				
CA	2519	677			A1		2004	1007		CA 2	2004-	2519		20040319					
EP	1608	622								EP 2	2004-		20040319						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
							RO,	•			•	•							
CN	1791				A				CN 2004-80013599										
JP	JP 2006521357						2006	0921		JP 2	2006-	5073	95		2	0040	319		
	IN 2005DN04098							0831		IN 2	2005-	DN40	98		2	0050	912		
	US 20060293339															0050			
	RIORITY APPLN. INFO.:										2003-					0030	324		
										WO 2	2004-	US85	32		A 2	0040	319		
OTHER SO	DURCE	(S):			MAR:	PAT	141:	3322											

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770726-82-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770726-82-4 CAPLUS

CN 2,4-Pyrimidinediamine, 6-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION

FULL ESTIMATED COST

7.37 560.11

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

-0.80 -1.60

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=>

Uploading C:\Program Files\Stnexp\Queries\10550641claim39.str



chain nodes : 24 25 26 28 29 30 31 32 34 35 36 ring nodes :  $1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17 \quad 18$ chain bonds :  $1-32 \quad 2-31 \quad 3-30 \quad 4-29 \quad 5-8 \quad 6-24 \quad 7-36 \quad 9-28 \quad 11-26 \quad 12-15 \quad 13-35 \quad 14-25 \quad 17-34$ ring bonds :  $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18$ 14-15 15-16 16-17 17-18 exact/norm bonds : 1-32 2-31 3-30 4-29 7-36 9-28 11-26 13-35 14-25exact bonds : 5-8 6-24 12-15 17-34 normalized bonds :  $1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18$ 14-15 15-16 16-17 17-18 isolated ring systems : containing 1:7:13:G1:C,N

G2:C,H

Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 26:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 32:CLASS 34:CLASS 35:CLASS 36:CLASS

## L10 STRUCTURE UPLOADED

=> s 110 full

FULL SEARCH INITIATED 14:50:19 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1417 TO ITERATE

100.0% PROCESSED 1417 ITERATIONS 0 ANSWERS

SEARCH TIME: 00.00.01

L11 0 SEA SSS FUL L10

=> file reg

SINCE FILE TOTAL ENTRY SESSION COST IN U.S. DOLLARS FULL ESTIMATED COST 180.20 740.31

TOTAL DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -1.60

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

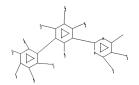
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http://www.cas.org/support/stngen/stndoc/properties.html

=>

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chain nodes :

ring nodes :

 $1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17 \quad 18$ 

chain bonds :

1-31 2-30 3-29 4-28 5-8 6-24 7-35 9-27 10-36 11-25 12-15 13-34 17-33

18-37

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18

14-15 15-16 16-17 17-18

exact/norm bonds :

<12/04/2007>

Erich Leese

G1:C, N

G2:C,H

G3:C,O

# Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS

#### L12 STRUCTURE UPLOADED

=> d 112 L12 HAS NO ANSWERS L12 STR

G1 C,N

G2 C, H

G3 C, O

Structure attributes must be viewed using STN Express query preparation.

=> s 112 full

FULL SEARCH INITIATED 14:57:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 4667 TO ITERATE

100.0% PROCESSED 4667 ITERATIONS 6 ANSWERS

SEARCH TIME: 00.00.01

L13 6 SEA SSS FUL L12

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 182.04 922.35

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE
ENTRY
SESSION

CA SUBSCRIBER PRICE

0.00
-1.60

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=> d ibib abs hitstr tot

L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA	TENT	ΝΟ.			KIND		DATE		APPI	LICAT	DATE						
	2004			2004			WO 2	2004-		20040319							
WO	2004084824				А3		20050331										
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KΖ,	LC,
											, MK,						
											, sc,		•				
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	RW:										, SZ,		•				
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											MC,						
											GN,						
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AU	2004	,			A 1	2004	1007		AU 2	2004-	2243	92		20040319			
	2519											20040319					
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CN	1791				A								EE, HU, PL, SK 20040319				
							2006				2006-						
	JP 2006521357 IN 2005DN04098										2005-						
	US 20060293339															0050	
	CS 20060293339 RIORITY APPLN. INFO.:						2000	1220			2003 2003						
FRIORII.	LAFE	T11/ •	TIME O	• •							2003- 2004-					0040	-
OTHER SO	THER SOURCE(S):						141:	3322		VV 2	2004-	0000	J		A 2	0040	J 1 7

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770725-53-6P 770725-54-7P 770725-55-8P

770725-56-9P 770725-57-0P 770725-58-1P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain) 770725-53-6 CAPLUS

RN 770725-53-6 CAPLUS
CN Pyrimidine, 4-methyl-2-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-54-7 CAPLUS

CN 4-Pyrimidinecarboxylic acid, 2-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770725-55-8 CAPLUS

CN 4-Pyrimidinecarboxamide, 2-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770725-56-9 CAPLUS

CN Pyrimidine, 4-methyl-2-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-57-0 CAPLUS

CN 4-Pyrimidinecarboxylic acid, 2-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl](CA INDEX NAME)

RN 770725-58-1 CAPLUS

CN 4-Pyrimidinecarboxamide, 2-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
8.81 931.16

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

-0.80 -2.40

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

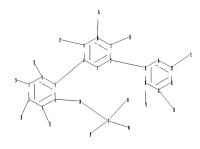
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

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```
chain nodes :
24 25 27 28 29 30 31 33 34 35 37 38 39 40 41
ring nodes :
1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17 \quad 18
chain bonds :
1-31 \quad 2-30 \quad 3-29 \quad 4-28 \quad 5-8 \quad 6-24 \quad 9-27 \quad 10-35 \quad 11-25 \quad 12-15 \quad 13-34 \quad 14-41 \quad 17-33
24-37 37-38 37-39 37-40
ring bonds :
1 - 2 \quad 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 5 - 6 \quad 7 - 8 \quad 7 - 12 \quad 8 - 9 \quad 9 - 10 \quad 10 - 11 \quad 11 - 12 \quad 13 - 14 \quad 13 - 18
14-15 15-16 16-17 17-18
exact/norm bonds :
1 - 31 \quad 2 - 30 \quad 3 - 29 \quad 4 - 28 \quad 6 - 24 \quad 9 - 27 \quad 10 - 35 \quad 11 - 25 \quad 13 - 34 \quad 14 - 41 \quad 24 - 37
exact bonds :
5-8 12-15 17-33 37-38 37-39 37-40
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18
14-15 15-16 16-17 17-18
isolated ring systems :
containing 1 : 7 : 13 :
```

G1:C,N

G2:C,H

G3:C,O

## Match level:

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 31:CLASS 33:CLASS 34:CLASS 35:CLASS 37:CLASS 38:CLASS 39:CLASS 40:CLASS 41:CLASS

# L15 STRUCTURE UPLOADED

=> d 115 L15 HAS NO ANSWERS L15 STF

G1 C,N

G2 C,H

G3 C, O

Structure attributes must be viewed using STN Express query preparation.

=> s 115 full

FULL SEARCH INITIATED 15:04:10 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 1526 TO ITERATE

100.0% PROCESSED 1526 ITERATIONS 4 ANSWERS

SEARCH TIME: 00.00.01

L16 4 SEA SSS FUL L15

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 179.74 1110.90 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -2.40

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=> d ibib abs hitstr tot

L17 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT	ΝΟ.			KIND DATE				APP	LICAT	DATE						
		24		A2 20041007				WO 2	2004-1	20040319							
WO	2004084824			A3 20050331													
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		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,
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					A2 20051228												
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	IN 2005DN04098																
US 20060293339																0050	
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OTHER SOURCE(S): MARPAT 141:332206

GΙ

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. 770725-40-1P 770725-41-2P ΙT

III

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770725-40-1 CAPLUS

CN Pyrimidine, 2-methyl-4-[6-[2-(trifluoromethoxy)phenyl]-2-pyridinyl]- (CA INDEX NAME)

RN 770725-41-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-[2-(trifluoromethoxy)phenyl]-2-pyridinyl]- (CA INDEX NAME)

IT 770725-42-3P 770727-22-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770725-42-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-[2-(trifluoromethoxy)phenyl]-2-pyridinyl]-(CA INDEX NAME)

RN 770727-22-5 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-[2-(trifluoromethoxy)pheny1]-2-pyridiny1]-, methyl ester (CA INDEX NAME)

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

7.85 1118.75

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE

-0.80 -3.20

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STRUCTURE FILE UPDATES: 26 MAY 2008 HIGHEST RN 1022798-85-1 DICTIONARY FILE UPDATES: 26 MAY 2008 HIGHEST RN 1022798-85-1

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

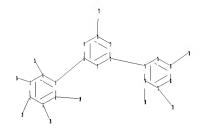
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10550641claim37.str



24 25 26 27 28 30 31 32 34 ring nodes:
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 chain bonds:
1-28 2-27 3-26 4-25 5-8 6-24 10-32 12-15 13-31 14-34 17-30 ring bonds:
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 exact/norm bonds:
1-28 2-27 3-26 4-25 6-24 10-32 13-31 14-34 exact bonds:
5-8 12-15 17-30 normalized bonds:
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

G1:C, N

G2:C,H

G3:C,O

## Match level:

isolated ring systems :
containing 1 : 7 : 13 :

chain nodes :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 32:CLASS 34:CLASS

## L18 STRUCTURE UPLOADED

=> s 118 full

FULL SEARCH INITIATED 15:07:54 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 395 TO ITERATE

100.0% PROCESSED 395 ITERATIONS 7 ANSWERS

SEARCH TIME: 00.00.01

L19 7 SEA SSS FUL L18

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 178.82 1297.57

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -3.20

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FILE COVERS 1907 - 27 May 2008 VOL 148 ISS 22 FILE LAST UPDATED: 26 May 2008 (20080526/ED)

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http://www.cas.org/legal/infopolicy.html

=> s 119 full L20 1 L19

=> d ibib abs hitstr tot

L20 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA:	PATENT NO.						DATE		APPLICATION NO.						DATE				
	2004084824						20041007		WO 2004-US8532						20040319				
WO	2004084824				A3 20050			0331	1										
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		ΤJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:												•						
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AU	·					A1 20041007				AU 2004-224392					2	20040319 20040319 E, MC, PT, U, PL, SK 20040319 20040319			
CA	CA 2519677				A1 20041007				CA 2	2004-	2519		20040319						
EP	EP 1608622			A2 20051228			EP 2004-757920						20040319						
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
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CN										CN 2004-80013599									
JP	JP 2006521357								JP 2006-507395						2	0040	319		
	IN 2005DN04098											98							
	US 20060293339															0050			
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										WO 2	2004-	US85	32		A 2	0040	319		
OTHER SO	OTHER SOURCE(S):						141:	3322											

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙΤ 770725-35-4P 770725-36-5P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770725-35-4 CAPLUS

CN

[4,4'-Bipyrimidine]-2-carboxylic acid, 6'-[2-(trifluoromethyl)phenyl]-, methyl ester (CA INDEX NAME)

RN 770725-36-5 CAPLUS

CN [4,4'-Bipyrimidine]-2-carboxamide, 6'-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

IT 770725-34-3P 770725-37-6P 770725-38-7P

770725-39-8P 770727-21-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770725-34-3 CAPLUS

CN 4,4'-Bipyrimidine, 2-methyl-6'-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770725-37-6 CAPLUS

CN 4,4'-Bipyrimidine, 2-methyl-6'-[2-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 770725-38-7 CAPLUS

CN [4,4'-Bipyrimidine]-2-carboxylic acid, 6'-[2-(trifluoromethoxy)phenyl](CA INDEX NAME)

RN 770725-39-8 CAPLUS

CN [4,4'-Bipyrimidine]-2-carboxamide, 6'-[2-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $F_3C-O$ 

RN 770727-21-4 CAPLUS

CN [4,4'-Bipyrimidine]-2-carboxylic acid, 6'-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

=> file reg
COST IN U.S. DOLLARS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 16.97 1314.54

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http://www.cas.org/support/stngen/stndoc/properties.html

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Uploading C:\Program Files\Stnexp\Queries\10550641claim36.str



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chain nodes :
24 25 26 27 28 30 31 34
ring nodes :
chain bonds :
1-28 2-27 3-26 4-25 5-8 6-24 12-15 13-31 14-34 17-30
ring bonds :
1 - 2 \quad 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 5 - 6 \quad 7 - 8 \quad 7 - 12 \quad 8 - 9 \quad 9 - 10 \quad 10 - 11 \quad 11 - 12 \quad 13 - 14 \quad 13 - 18
14-15 15-16 16-17 17-18
exact/norm bonds :
1-28 2-27 3-26 4-25 6-24 13-31 14-34
exact bonds :
5-8 12-15 17-30
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18
14-15 15-16 16-17 17-18
isolated ring systems :
containing 1:7:13:
G1:C, N
G2:C,H
G3:C,O
G4:C,H,O,Cl,Br,F,I,At
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 30:CLASS 31:CLASS 34:CLASS
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## L21 STRUCTURE UPLOADED

=> d 121 L21 HAS NO ANSWERS L21 STR

$$G2$$
 $G4$ 
 $G2$ 
 $G2$ 
 $G2$ 
 $G3$ 
 $G4$ 
 $G4$ 
 $G5$ 

G1 C, N

G2 C, H

G3 C, O

G4 C, H, O, Cl, Br, F, I, At

Structure attributes must be viewed using STN Express query preparation.

=> s 121 full

FULL SEARCH INITIATED 15:23:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9106 TO ITERATE

100.0% PROCESSED 9106 ITERATIONS 110 ANSWERS

SEARCH TIME: 00.00.01

L22 110 SEA SSS FUL L21

=> file capluis

'CAPLUIS' IS NOT A VALID FILE NAME SESSION CONTINUES IN FILE 'REGISTRY'

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=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.36	1492.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-4.00

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L23 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA:	PATENT NO.						DATE		APPLICATION NO.						DATE			
	2004084824						20041007		WO 2004-US8532						20040319			
WO	2004084824																	
	W:	ΑE,	ΑG,	AL,	ΑM,	ΑT,	ΑU,	ΑZ,	ΒA,	BB	, BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JP,	KE,	KG,	ΚP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		TJ.	TM,	TN.	TR.	TT.	TZ,	UA,	UG,	US	. UZ.	VC,	VN.	YU,	ZA,	ZM,	ZW	
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	EP 1608622													20040319				
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CN										CN 2004-80013599						•		
	JP 2006521357															BZ, CA, CH, FI, GB, GD, KR, KZ, LC, MZ, NA, NI, SK, SL, SY, ZA, ZM, ZW, AM, AZ, DE, DK, EE, RO, SE, SI, MR, NE, SN, 20040319 20040319 SE, MC, PT, HU, PL, SK 20040319 20040319 20040319 20040319 20040319 20040319		
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	US 20060293339																	
	RIORITY APPLN. INFO.:						2000	1220										
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OTHER SO	THER SOURCE(S):					MARPAT 141:33220				,,,	2004	0000	<i>J</i>		.s	0010	J 1 J	

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770723-58-5P 770723-59-6P 770724-99-7P 770725-00-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770723-58-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-59-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-99-7 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-00-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

ΙT 770723-60-9P 770723-70-1P 770723-71-2P 770723-72-3P 770723-73-4P 770723-74-5P 770723-75-6P 770723-76-7P 770723-77-8P 770723-78-9P 770723-79-0P 770723-80-3P 770723-81-4P 770723-82-5P 770723-83-6P 770723-84-7P 770723-85-8P 770723-86-9P 770723-87-0P 770723-88-1P 770723-89-2P 770723-90-5P 770723-91-6P 770723-92-7P 770723-93-8P 770723-94-9P 770723-98-3P 770724-00-0P 770724-01-1P 770724-06-6P 770724-11-3P 770724-12-4P 770724-13-5P 770724-14-6P 770724-15-7P 770724-16-8P 770724-17-9P 770724-18-0P 770724-22-6P 770724-23-7P 770724-24-8P 770724-25-9P 770724-33-9P 770724-34-0P 770724-35-1P 770724-36-2P 770724-37-3P 770724-38-4P 770724-39-5P 770724-40-8P 770724-41-9P 770724-42-0P 770724-43-1P 770724-44-2P 770724-51-1P 770724-54-4P 770724-58-8P

RN CN

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770725-32-1P 770725-33-2P 770727-16-7P
770727-17-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of biaryl substituted 6-membered heterocycles as sodium channel
   blockers for treatment or prevention of pain)
770723-60-9 CAPLUS
2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-
(CA INDEX NAME)
```

RN 770723-70-1 CAPLUS
CN 2-Pyrimidinecarboxamide, N-methoxy-N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-71-2 CAPLUS
CN Methanone, 4-morpholinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2 pyrimidinyl]- (CA INDEX NAME)

RN 770723-72-3 CAPLUS

CN Ethanone, 1-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-73-4 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]-, methyl ester (CA INDEX NAME)

RN 770723-74-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-cyanoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-75-6 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-76-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-77-8 CAPLUS

CN Methanone, 1-piperazinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-78-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-2H-tetrazol-5-yl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-79-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)

RN 770723-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 770723-81-4 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[1-(aminocarbonyl)cyclopropyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-82-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[2-(dimethylamino)ethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-83-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]- 3-yl]- (CA INDEX NAME)

RN 770723-84-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N,N-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-85-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770723-86-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1S)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Erich Leese

Absolute stereochemistry.

$$H_2N$$
 $Me$ 
 $N$ 
 $N$ 
 $O$ 
 $CF_3$ 

RN 770723-87-0 CAPLUS

<12/04/2007>

CN 2-Pyrimidinecarboxamide, N-[2-(1-piperidinyl)ethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-88-1 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(1,1-dimethylethyl)-4-[2'- (trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-89-2 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1R)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $H_2N$ 
 $H_2N$ 
 $Me$ 
 $N$ 
 $CF$ 

RN 770723-90-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 1-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-91-6 CAPLUS

CN Pyrimidine, 2,5-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770723-92-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-93-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]- 3-yl]- (CA INDEX NAME)

10/513699

RN 770723-94-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-98-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-00-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-01-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} F_3C \\ \hline \\ H_2N-C \\ \hline \\ O \end{array}$$

RN 770724-06-6 CAPLUS

CN 2-Pyrimidinecarbonitrile, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-11-3 CAPLUS

CN Pyrimidine, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770724-12-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-13-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ H_2N-C & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & \\ & & \\ &$$

RN 770724-14-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-15-7 CAPLUS

CN Pyrimidine, 2-methyl-4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-16-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-17-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & N & & \\ & & \\ H_2N-C & & \\ & & \\ O & & \\ \end{array}$$

RN 770724-18-0 CAPLUS

CN Pyrimidine, 4-(2'-chloro[1,1'-biphenyl]-3-yl)-2-methyl- (CA INDEX NAME)

RN 770724-22-6 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, N-(1,1-dimethylethyl)-3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-23-7 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, 3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ Me & & N & \\ \end{array}$$

RN 770724-24-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1, 1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-25-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-33-9 CAPLUS

CN Pyrimidine, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-34-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-35-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & t-BuO \\ & & \\ H_2N-C & N & \\ & & \\ O & & \end{array}$$

RN 770724-36-2 CAPLUS

CN Pyrimidine, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-37-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-38-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$

RN 770724-39-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-40-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-41-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-42-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-formyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-43-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $CF_3$ 

RN 770724-44-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-51-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-methyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-54-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-58-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-59-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',6'-dimethyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{Me} \\ & \text{O} \end{array}$$

RN 770724-60-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(1,1-dimethylethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-62-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-63-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $AC$ 

RN 770724-64-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-65-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-cyano[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-68-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[1,1'-biphenyl]-3-yl- (CA INDEX NAME)

RN 770724-78-2 CAPLUS

CN 2-Pyrimidineacetamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & F_3C-O \\ & & & & \\ H_2N-C-CH_2 & N & & \end{array}$$

RN 770724-79-3 CAPLUS

CN 2-Pyrimidineacetonitrile, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-83-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-84-0 CAPLUS

CN 2-Pyrimidinemethanol,  $\alpha$ -methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-85-1 CAPLUS

CN Acetamide, N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 770724-86-2 CAPLUS

CN Sulfamic acid, [4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl ester (9CI) (CA INDEX NAME)

RN 770724-97-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[(4-oxo-1-piperidinyl)methyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-01-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-02-5 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-03-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-04-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $F_3C$ 
 $F$ 

RN 770725-05-8 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-06-9 CAPLUS

CN Pyrimidine, 2-methyl-4-[4-(phenylmethoxy)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-07-0 CAPLUS

CN [1,1'-Biphenyl]-4-ol, 3-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)-(CA INDEX NAME)

RN 770725-08-1 CAPLUS

CN Acetamide, N-[5-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

RN 770725-09-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-10-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-11-6 CAPLUS

CN Pyrimidine, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-12-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-13-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-14-9 CAPLUS

CN Pyrimidine, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-15-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-16-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-17-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-18-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]- (9CI) (CA INDEX NAME)

RN 770725-19-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]-, methyl ester (9CI) (CA INDEX NAME)

RN 770725-20-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]- (9CI) (CA INDEX NAME)

RN 770725-21-8 CAPLUS

CN Pyrimidine, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-22-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-23-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-24-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-25-2 CAPLUS

CN Pyrimidine, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-26-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-27-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-28-5 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-29-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-30-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-31-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-32-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

$$\mathsf{F}_3\mathsf{C}-\mathsf{CH}_2-\mathsf{O} \\ \qquad \mathsf{Ph} \\ \qquad \mathsf{N} \\ \mathsf{C}-\mathsf{NH}_2 \\ \mathsf{O} \\ \\ \mathsf{O} \\ \\ \mathsf{N} \\ \mathsf{N} \\ \mathsf{C}-\mathsf{NH}_2 \\ \mathsf{O} \\ \mathsf{O}$$

RN 770725-33-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-fluoro-6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $O-CH_2-CF_3$ 

RN 770727-16-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-17-8 CAPLUS
CN 2-Pyrimidinecarboxamide, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

=> file reg

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
7.37 1500.27

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

CA SUBSCRIBER PRICE ENTRY SESSION -0.80 -4.80

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http://www.cas.org/support/stngen/stndoc/properties.html

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COST IN U.S. DOLLARS

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL

ENTRY

6.90

1507.17

CA SUBSCRIBER PRICE ENTRY SESSION 0.00 -4.80

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STRUCTURE FILE UPDATES: 26 MAY 2008 HIGHEST RN 1022798-85-1 DICTIONARY FILE UPDATES: 26 MAY 2008 HIGHEST RN 1022798-85-1

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TSCA INFORMATION NOW CURRENT THROUGH January 9, 2008.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10550641claim35.str

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chain nodes :
24 25 28
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
chain bonds :
5-8 12-15 13-25 14-28 17-24
ring bonds :
1 - 2 \quad 1 - 6 \quad 2 - 3 \quad 3 - 4 \quad 4 - 5 \quad 5 - 6 \quad 7 - 8 \quad 7 - 12 \quad 8 - 9 \quad 9 - 10 \quad 10 - 11 \quad 11 - 12 \quad 13 - 14 \quad 13 - 18
14-15 15-16 16-17 17-18
exact/norm bonds :
13-25 14-28
exact bonds :
5-8 12-15 17-24
normalized bonds :
1-2 \quad 1-6 \quad 2-3 \quad 3-4 \quad 4-5 \quad 5-6 \quad 7-8 \quad 7-12 \quad 8-9 \quad 9-10 \quad 10-11 \quad 11-12 \quad 13-14 \quad 13-18
14-15 15-16 16-17 17-18
isolated ring systems :
containing 7 : 13 :
```

G1:C,N

<12/04/2007>

G2:C,H

G3:C,O

G4:C,H,O,Cl,Br,F,I,At

## Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 24:CLASS 25:CLASS 28:CLASS

## L24 STRUCTURE UPLOADED

=> d 124 L24 HAS NO ANSWERS L24 STR

G1 C, N

G2 C,H

G3 C, O

G4 C,H,O,Cl,Br,F,I,At

Structure attributes must be viewed using STN Express query preparation.

=> s 124 ful

FULL SEARCH INITIATED 15:35:44 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9106 TO ITERATE

100.0% PROCESSED 9106 ITERATIONS 156 ANSWERS

SEARCH TIME: 00.00.01

L25 156 SEA SSS FUL L24

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION 178.36 1685.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE TOTAL
ENTRY SESSION
0.00 -4.80

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<12/04/2007>

L26 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

GΙ

PA:	PATENT NO.					KIND		DATE		APPLICATION NO.					DATE			
	2004084824								WO 2004-US8532						20040319			
WO	2004084824				А3		20050331											
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB	, BG,	BR,	BW,	BY,	ΒZ,	CA,	CH,	
											, EC,							
											, JP,							
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	RW:	,		,		,			•		, SZ,	,				,		
											, BG,							
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		TD,		,	- ,	- ,	,	- ,	- ,		, - ,	- ~ /	- ,	,	,	,	- ,	
AU	AU 2004224392				A1 20041007					AU 2004-224392					20040319			
								CA 2004-2519677										
EP	EP 1608622						EP 2004-757920											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	, IT,	LI,	LU,	NL,	SE,	MC,	PT,	
											, TR,							
CN										CN 2004-80013599								
JP										JP 2006-507395								
									IN 2005-DN4098									
	US 20060293339															0050		
	IORITY APPLN. INFO.:										2003-							
	<b>-</b>										2004-					0040	-	
OTHER SO	HER SOURCE(S):					MARPAT 141:332206					'						-	

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770723-58-5P 770723-59-6P 770724-99-7P 770725-00-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770723-58-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-59-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-99-7 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-00-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

ΙT 770723-60-9P 770723-70-1P 770723-71-2P 770723-72-3P 770723-73-4P 770723-74-5P 770723-75-6P 770723-76-7P 770723-77-8P 770723-78-9P 770723-79-0P 770723-80-3P 770723-81-4P 770723-82-5P 770723-83-6P 770723-84-7P 770723-85-8P 770723-86-9P 770723-87-0P 770723-88-1P 770723-89-2P 770723-90-5P 770723-91-6P 770723-92-7P 770723-93-8P 770723-94-9P 770723-98-3P 770724-00-0P 770724-01-1P 770724-06-6P 770724-08-8P 770724-09-9P 770724-10-2P 770724-11-3P 770724-12-4P 770724-13-5P 770724-14-6P 770724-15-7P 770724-16-8P 770724-17-9P 770724-18-0P 770724-19-1P 770724-20-4P 770724-21-5P 770724-22-6P 770724-23-7P 770724-24-8P 770724-25-9P 770724-26-0P 770724-27-1P 770724-28-2P 770724-29-3P 770724-30-6P 770724-31-7P 770724-32-8P 770724-33-9P 770724-34-0P

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770724-35-1P 770724-36-2P 770724-37-3P
770724-38-4P 770724-39-5P 770724-40-8P
770724-41-9P 770724-42-0P 770724-43-1P
770724-44-2P 770724-45-3P 770724-46-4P
770724-47-5P 770724-48-6P 770724-49-7P
770724-50-0P 770724-51-1P 770724-52-2P
770724-53-3P 770724-54-4P 770724-55-5P
770724-56-6P 770724-57-7P 770724-58-8P
770724-59-9P 770724-60-2P 770724-61-3P
770724-62-4P 770724-63-5P 770724-64-6P
770724-65-7P 770724-66-8P 770724-67-9P
770724-68-0P 770724-69-1P 770724-70-4P
770724-71-5P 770724-72-6P 770724-73-7P
770724-78-2P 770724-79-3P 770724-83-9P
770724-84-0P 770724-85-1P 770724-86-2P
770724-90-8P 770724-91-9P 770724-92-0P
770724-93-1P 770724-94-2P 770724-95-3P
770724-96-4P 770724-97-5P 770724-98-6P
770725-01-4P 770725-02-5P 770725-03-6P
770725-04-7P 770725-05-8P 770725-06-9P
770725-07-0P 770725-08-1P 770725-09-2P
770725-10-5P 770725-11-6P 770725-12-7P
770725-13-8P 770725-14-9P 770725-15-0P
770725-16-1P 770725-17-2P 770725-18-3P
770725-19-4P 770725-20-7P 770725-21-8P
770725-22-9P 770725-23-0P 770725-24-1P
770725-25-2P 770725-26-3P 770725-27-4P
770725-28-5P 770725-29-6P 770725-30-9P
770725-31-0P 770725-32-1P 770725-33-2P
770727-13-4P 770727-14-5P 770727-15-6P
770727-16-7P 770727-17-8P 770727-18-9P
770727-19-0P 770727-20-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of biaryl substituted 6-membered heterocycles as sodium channel
   blockers for treatment or prevention of pain)
770723-60-9 CAPLUS
2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-
(CA INDEX NAME)
```

RN

CN

RN 770723-70-1 CAPLUS
CN 2-Pyrimidinecarboxamide, N-methoxy-N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-71-2 CAPLUS

CN Methanone, 4-morpholinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-72-3 CAPLUS

CN Ethanone, 1-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-73-4 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]-, methyl ester (CA INDEX NAME)

RN 770723-74-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-cyanoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-75-6 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-76-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-77-8 CAPLUS

CN Methanone, 1-piperazinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-78-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-2H-tetrazol-5-yl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-79-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)

RN 770723-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 770723-81-4 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[1-(aminocarbonyl)cyclopropyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-82-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[2-(dimethylamino)ethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-83-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-84-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N,N-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-85-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770723-86-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1S)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $Me$ 
 $N$ 
 $N$ 
 $CF_3$ 

RN 770723-87-0 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[2-(1-piperidiny1)ethy1]-4-[2'-(trifluoromethoxy)[1,1'-bipheny1]-3-y1]- (CA INDEX NAME)

RN 770723-88-1 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(1,1-dimethylethyl)-4-[2'- (trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-89-2 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1R)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $R$ 
 $N$ 
 $N$ 
 $CF_3$ 

RN 770723-90-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 1-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-91-6 CAPLUS

CN Pyrimidine, 2,5-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770723-92-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-93-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-94-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-98-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-00-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-

(CA INDEX NAME)

RN 770724-01-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-06-6 CAPLUS

CN 2-Pyrimidinecarbonitrile, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-08-8 CAPLUS

CN Pyrimidine, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-09-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-

biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-10-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $O$ 
 $CF_3$ 

RN 770724-11-3 CAPLUS

CN Pyrimidine, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770724-12-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-13-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ H_2N-C & & & \\ & & & \\ O & & & \\ \end{array}$$

RN 770724-14-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-15-7 CAPLUS

CN Pyrimidine, 2-methyl-4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-16-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-17-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-18-0 CAPLUS

CN Pyrimidine, 4-(2'-chloro[1,1'-biphenyl]-3-yl)-2-methyl- (CA INDEX NAME)

RN 770724-19-1 CAPLUS

CN Pyrimidine, 4-(3'-chloro[1,1'-biphenyl]-3-yl)-2-methyl- (CA INDEX NAME)

RN 770724-20-4 CAPLUS

CN [1,1'-Biphenyl]-2-sulfonamide, N-(1,1-dimethylethyl)-3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-21-5 CAPLUS

CN [1,1'-Biphenyl]-2-sulfonamide, 3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-22-6 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, N-(1,1-dimethylethyl)-3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-23-7 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, 3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C \\ \end{array}$$

RN 770724-24-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1, 1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-25-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-26-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-27-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $C1$ 

RN 770724-28-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)-, methyl ester (CA INDEX NAME)

RN 770724-29-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-[[(1,1-dimethylethyl)amino]sulfonyl][1, 1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-30-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-31-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[[(1,1-dimethylethyl)amino]sulfonyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-32-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-33-9 CAPLUS

CN Pyrimidine, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-34-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-35-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $N$ 
 $t-BuO$ 
 $O$ 

RN 770724-36-2 CAPLUS

CN Pyrimidine, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-37-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-38-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$

RN 770724-39-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-40-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-41-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-42-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-formyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-43-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-44-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-45-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-46-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-chloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-47-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-48-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-49-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',3'-dimethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
  $N$   $OMe$ 

RN 770724-50-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(5'-chloro-2'-methoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} \\ & \text{N} \\ & \text{O} \end{array}$$

RN 770724-51-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-methyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \\ & \text{N} & \\ & \text{C-NH}_2 \\ & \text{O} \end{array}$$

RN 770724-52-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-fluoro-2'-methyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $M$ 
 $M$ 
 $M$ 

RN 770724-53-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(1H-pyrazol-1-yl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-54-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-55-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-chloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-56-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-ethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-57-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-ethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-58-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-59-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',6'-dimethyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{N} \\ & \text{O} \end{array}$$

RN 770724-60-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(1,1-dimethylethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-61-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-62-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-63-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-64-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-65-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-cyano[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{NC} & & \\ \hline & \text{N} & \\ \hline & \text{C-NH}_2 \\ \hline & \text{O} \end{array}$$

RN 770724-66-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $O-CF_3$ 

RN 770724-67-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',4'-difluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $F$ 

RN 770724-68-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[1,1'-biphenyl]-3-yl- (CA INDEX NAME)

RN 770724-69-1 CAPLUS

CN Methanesulfonamide, N-methyl-N-[3'-(2-methyl-4-pyrimidinyl)-2-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 770724-70-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-[methyl(methylsulfonyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & F_3C-O \\ H_2N-C & N \\ \hline & N-Me \\ \hline & O \\ \hline & S-Me \\ \hline & O \end{array}$$

RN 770724-71-5 CAPLUS

CN Propanamide, 2,2-dimethyl-N-[3'-(2-methyl-4-pyrimidinyl)-2-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

$$F_3C-O$$
 $NH-C-Bu-t$ 
 $O$ 

RN 770724-72-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4'-[(2,2-dimethyl-1-oxopropyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-73-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-[(2,2-dimethyl-1-oxopropyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & F_3C-O \\ H_2N-C & N \\ \hline & NH-C-Bu-t \\ \hline & O \\ \end{array}$$

RN 770724-78-2 CAPLUS

CN 2-Pyrimidineacetamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-79-3 CAPLUS

CN 2-Pyrimidineacetonitrile, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-83-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-84-0 CAPLUS

CN 2-Pyrimidinemethanol,  $\alpha$ -methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-85-1 CAPLUS

CN Acetamide, N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 770724-86-2 CAPLUS

CN Sulfamic acid, [4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl ester (9CI) (CA INDEX NAME)

RN 770724-90-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3-(8-quinolinyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} O \\ H_2N-C \\ N \\ \end{array}$$

RN 770724-91-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3-benzo[b]thien-7-ylphenyl)- (CA INDEX NAME)

$$\begin{array}{c} O \\ \parallel \\ H_2N-C \\ N \\ \end{array}$$

RN 770724-92-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3-(2-methyl-5-quinolinyl)phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N-C & & \\ & & \\ O & & \\ \end{array}$$

RN 770724-93-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3-(6-quinolinyl)phenyl]- (CA INDEX NAME)

$$H_2N-C$$

$$N$$

RN 770724-94-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3',4',5'-trimethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} \text{OMe} \\ \text{OMe} \\ \\ \text{O} \\ \end{array}$$

RN 770724-95-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3-(1-naphthalenyl)phenyl]- (CA INDEX NAME)

RN 770724-96-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3-(5-quinolinyl)phenyl]- (CA INDEX NAME)

## 10/513699

RN 770724-97-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[(4-oxo-1-piperidinyl)methyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-98-6 CAPLUS

CN 1H-Indole-1-carboxylic acid, 5-[3-[2-(aminocarbonyl)-4-pyrimidinyl]phenyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 770725-01-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]- 3-y1]- (CA INDEX NAME)

RN 770725-02-5 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

<12/04/2007>

RN 770725-03-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-04-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $F_3C$ 
 $F$ 

RN 770725-05-8 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-06-9 CAPLUS

CN Pyrimidine, 2-methyl-4-[4-(phenylmethoxy)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-07-0 CAPLUS

CN [1,1'-Biphenyl]-4-ol, 3-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)(CA INDEX NAME)

RN 770725-08-1 CAPLUS

CN Acetamide, N-[5-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

RN 770725-09-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-10-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-11-6 CAPLUS

CN Pyrimidine, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-12-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-13-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-14-9 CAPLUS

CN Pyrimidine, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-15-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-16-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-17-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-18-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]- (9CI) (CA INDEX NAME)

RN 770725-19-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]-, methyl ester (9CI) (CA INDEX NAME)

RN 770725-20-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]-(9CI) (CA INDEX NAME)

RN 770725-21-8 CAPLUS

CN Pyrimidine, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-22-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-23-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-24-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-25-2 CAPLUS

CN Pyrimidine, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-26-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-27-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $O$ 
 $C1$ 
 $F_3C-O$ 
 $O$ 
 $C1$ 

RN 770725-28-5 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

$$\begin{array}{c|c} & F_3C-CH_2-O \\ \hline \\ \text{Me} & F \end{array}$$

RN 770725-29-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-30-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-31-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-32-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-33-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-fluoro-6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ H_2N-C & & & & \\ \hline \\ O & & & & \\ O-CH_2-CF_3 \end{array}$$

RN 770727-13-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ H_2N-C & & & \\ & & & \\ O & & & \\ \end{array}$$

RN 770727-14-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-chloro-2'-(trifluoromethyl)] [1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ H_2N-C & & & \\ & & & \\ O & & & \\ & & & \\ CF_3 & & \\ \end{array}$$

RN 770727-15-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',6'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ H_2N-C & & & \\ & & & \\ O & & & \\ \end{array}$$

RN 770727-16-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-17-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-18-9 CAPLUS

CN Pyrimidine, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2,5-dimethyl- (CA INDEX NAME)

RN 770727-19-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl-, methyl ester (CA INDEX NAME)

RN 770727-20-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)

=> file reg COST IN U.S. DOLLARS

FULL ESTIMATED COST

CA SUBSCRIBER PRICE

SINCE FILE TOTAL ENTRY SESSION 8.81 1694.34

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

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ENTRY SESSION -0.80 -5.60

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http://www.cas.org/support/stngen/stndoc/properties.html

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ring nodes :

 $1 \quad 2 \quad 3 \quad 4 \quad 5 \quad 6 \quad 7 \quad 8 \quad 9 \quad 10 \quad 11 \quad 12 \quad 13 \quad 14 \quad 15 \quad 16 \quad 17 \quad 18$ 

chain bonds : 5-8 12-15

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18

exact bonds :

5-8 12-15

normalized bonds :

10/513699

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18 14-15 15-16 16-17 17-18 isolated ring systems: containing 1: 7:13:

G1:C,N

G2:C,H

G3:C,O

G4:C,H,O,Cl,Br,F,I,At

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom

## L27 STRUCTURE UPLOADED

=> d 127 L27 HAS NO ANSWERS L27 ST

G1 C,N

G2 C,H

G3 C, O

G4 C, H, O, Cl, Br, F, I, At

Structure attributes must be viewed using STN Express query preparation.

=> s 127 full

FULL SEARCH INITIATED 15:40:36 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 14858 TO ITERATE

100.0% PROCESSED 14858 ITERATIONS SEARCH TIME: 00.00.01

346 ANSWERS

L28 346 SEA SSS FUL L27

=> file caplus
COST IN U.S. DOLLARS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
178.36
1872.70

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION

CA SUBSCRIBER PRICE 0.00 -5.60

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Erich Leese

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<12/04/2007>

L29 ANSWER 1 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:156813 CAPLUS

DOCUMENT NUMBER: 148:225226

TITLE: Organic electroluminescent device

INVENTOR(S): Iwakuma, Toshihiro; Arakane, Takashi; Arai, Hiromasa;

Nagashima, Hideaki

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 71pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	CENT	NO.			KIN	D	DATE		j	APPL	ICAT		DATE				
WO 2008015949				A1	_	2008	0207	1	 WO 2	007-	JP64	 631		20070726			
	W:	W: AE, AG, AL,		AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,
		CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,
		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,
		KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	ME,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,
		PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	ТJ,	TM,	TN,
		TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW				
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,
		IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,
		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	NE,	SN,	TD,	TG,	BW,
		GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,
		BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM									

PRIORITY APPLN. INFO.:

JP 2006-213761 A 20060804

The invention relates to an organic electroluminescent device comprising a cathode, an anode, and an organic layer, which is formed between the cathode and the anode and includes at least a light-emitting layer and an electron transport layer. An electron transport material constituting the electron transport layer and having the slowest electron mobility has an electron mobility of 2.0 + 10-5 cm2/Vs or more at an elec. field intensity of 0.4 MV/cm to 0.5 MV/cm. When the ratio of the electron mobility to the hole mobility of a host material constituting the light-emitting layer is denoted by  $\Delta$ EM and the ratio of the electron mobility to the hole mobility of the electron transport material constituting the electron transport layer and having the slowest electron mobility is denoted by  $\Delta$ ET, the organic electroluminescence device satisfies the following relationships:  $\Delta$ ET > 1, 0.3  $\leq$   $\Delta$ EM  $\leq$  10, and  $\Delta$ ET >  $\Delta$ EM.

IT 864377-29-7

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 864377-29-7 CAPLUS

CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 2 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1420328 CAPLUS

DOCUMENT NUMBER: 148:67473

TITLE: Material for organic electroluminescence element, and

organic electroluminescence element using the material INVENTOR(S): Iwakuma, Toshihiro; Matsuura, Masahide; Nakano, Yuki;

Ikeda, Hidetsugu

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	KIN	D	DATE			APPL	ICAT	ION 1		DATE							
WO 2007142083				A1	<del></del>	2007	 1213	,	wo 2	007-	JP60	921		20070529			
W:	W: AE, AG, AL,		AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	CA,	
	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,	FΙ,	
	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	
	KM,	KN,	KP,	KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,	MG,	
	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	
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	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW						
RW	: AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
	IS,	ΙΤ,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	
	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG,	BW,	
	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	
	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	MT										

PRIORITY APPLN. INFO.:

JP 2006-154305 A 20060602

AB Provided are an organic electroluminescence element composed of a compound including a hetero atom having a specific structure, and an organic electroluminescence element wherein an organic thin film layer, which is composed of one or a plurality of layers including at least a light emitting layer, is sandwiched between an anode and a cathode. The organic electroluminescence element, which has high emission efficiency, no pixel defect, excellent heat resistance and a long life, is provided by permitting the organic thin film layer to include the organic EL element material. The organic electroluminescence element material for providing such organic electroluminescence element is also provided.

IT 864377-29-7

RL: TEM (Technical or engineered material use); USES (Uses) (material for organic electroluminescence element, and organic electroluminescence element using the material)

RN 864377-29-7 CAPLUS

CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

REFERENCE COUNT:

9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 3 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:971415 CAPLUS

DOCUMENT NUMBER: 147:311076

TITLE: Organic electroluminescent device

INVENTOR(S): Iwakuma, Toshihiro; Matsuura, Masahide; Nagashima, Hideaki; Ikeda, Shuji; Nakamura, Hiroaki; Kusumoto,

Tadashi

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 20pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007220721	A	20070830	JP 2006-36479	20060214
PRIORITY APPLN. INFO.:			JP 2006-36479	20060214
AB The invention relat	es to	an organic	electroluminescent de	evice, especially
relates				

to a phosphorescent organic electroluminescent device, comprising a 1st layer, a 2nd layer, an active layer containing a ortho-metalated complex doped in a host material, and a cathode, stacked in that order on an anode, wherein the relationships represented by TD + 10 eV  $\leq$  Th1, TD + 0.10 eV  $\leq$  Th2, and TD + 0.10 eV  $\leq$  TH are satisfied, wherein the TD, Th1, Th,2 and TH are the lowest excited triplet state energy of ortho-metalated complex, the 1st layer material, the 2d layer material and the active layer host, resp., in order to realize the high quantum efficiency device.

IT 864377-29-7

RL: TEM (Technical or engineered material use); USES (Uses) (organic electroluminescent device)

RN 864377-29-7 CAPLUS

CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-4-yl]-(CA INDEX NAME)

INVENTOR(S):

L29 ANSWER 4 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:640321 CAPLUS

DOCUMENT NUMBER: 147:46155

TITLE: Drugs containing aminocyanopyrimidine derivatives

having adenosine A2A receptor agonistic effects Kato, Masaya; Sato, Norisuke; Okada, Minoru; Uno,

Tetsuyuki; Ito, Nobuaki; Takeji, Yasuhiro; Shinohara,

Hisashi; Fuwa, Masahiro

PATENT ASSIGNEE(S): Ohtsuka Pharmaceutical Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 292pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007145828	A	20070614	JP 2006-293353	20061027
PRIORITY APPLN. INFO.:			JP 2005-315444 F	20051028

OTHER SOURCE(S): MARPAT 147:46155

GΙ

AB The invention provide drugs having adenosine A2A receptor agonistic effects, suitable for use in treatment of eye disease, e.g. glaucoma, wherein the drugs contain compds. represented by a formula I (R1 = (un)substituted aryl, heterocyclic; R2 = C3-6 alkyl, lower alkenyl, etc.; R3 = H, lower alkyl, acyl) or their salts as active components. For example, N-[4-[6-amino-5-cyano-2-(6-methylpyridin-2-ylmethylsulfanyl)pyrimidin-4-yl]phenyl]acetamide was prepared, and examined for its effect on adenosine A2A receptor in vitro, and intraocular pressure in rabbits.

IT 939787-27-6P 939787-35-6P 939787-49-2P

939787-51-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drugs containing aminocyanopyrimidine derivs. having adenosine A2A receptor agonistic effects)

RN 939787-27-6 CAPLUS

CN 5-Pyrimidinecarbonitrile, 4-amino-6-[1,1'-biphenyl]-3-yl-2-[(3-pyridinylmethyl)thio]- (CA INDEX NAME)

RN 939787-35-6 CAPLUS

CN 5-Pyrimidinecarbonitrile, 4-amino-6-[1,1'-biphenyl]-3-yl-2-[[(2-methyl-4-thiazolyl)methyl]thio]- (CA INDEX NAME)

RN 939787-49-2 CAPLUS

CN 5-Pyrimidinecarbonitrile, 4-amino-6-[1,1'-biphenyl]-3-yl-2-[[(2-cyanophenyl)methyl]thio]- (CA INDEX NAME)

RN 939787-51-6 CAPLUS

CN 5-Pyrimidinecarbonitrile, 4-amino-6-[1,1'-biphenyl]-3-yl-2-[[(3-nitrophenyl)methyl]thio]- (CA INDEX NAME)

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L29 ANSWER 5 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN
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ACCESSION NUMBER: 2007:283477 CAPLUS

DOCUMENT NUMBER: 146:307085

TITLE: Blue-light emitting organic electroluminescence

element

INVENTOR(S): Matsuura, Masahide; Iwakuma, Toshihiro

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 39pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT 1	NO.			KIND DATE					APPL	ICAT		DATE					
	WO	2007	0294	26		A1		2007	0315		WO 2	006-	JP31	4795		2	0060	726	
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			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	
			KR,	KΖ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	
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			US,	UZ,	VC,	VN,	ZA,	ZM,	ZW										
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			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,	
			GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
			KG,	KΖ,	MD,	RU,	ТJ,	TM											
	EP	1923	930			A1		2008	0521		EP 2	006-	7817	07		20060726			
		R:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	
			IS,	ΙΤ,	LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR		
	US	2007	0069	638		A1		2007	0329		US 2	006-	4980	71		2	0060	803	
	KR	2008	0416	82		A		2008	0513		KR 2	-800	7053	47		2	0080	304	
PRIOR	ORITY APPLN. INFO.:										JP 2	005-	2564	48	2	A 20050905			
										,	WO 2	006-	JP31	4795	Ţ	W 20060726			
WO 2006-JP31479											_				_				

A blue-light emitting organic electroluminescence element is provided with at least a light emitting layer between an anode and a cathode. The light emitting layer contains a host material and a plurality of kinds of dopants. At least one of the dopants has UV emitting characteristics. ΙT

862423-40-3 RL: TEM (Technical or engineered material use); USES (Uses) (electron transport layers; blue-light emitting organic electroluminescent devices)

RN 862423-40-3 CAPLUS

9H-Carbazole, 9,9'-[5'-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1''-terphenyl]-CN 4,4''-diyl]bis- (CA INDEX NAME)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L29 ANSWER 6 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:257447 CAPLUS DOCUMENT NUMBER: 146:261785
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DOCOMENI NOMBER.

TITLE: Organic electroluminescence device

INVENTOR(S): Iwakuma, Toshihiro; Matsuura, Masahide; Nagashima,

Hideaki; Ikeda, Hidetsugu; Nakamura, Hiroaki;

Kusumoto, Tadashi

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan SOURCE: U.S. Pat. Appl. Publ., 14pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.		KIND		DATE			APPL	ICAT		DATE						
US 20070052346 WO 2007029402				A1 A1		2007 2007				 006- 006-				20060705 20060628			
W:				,		AU, DE,					,					,	
	,			•	•	HU,	,	,	,	,	•	,	,	,	,	,	
	•					LR,											
	•	•	•		•	NI,	•	•	•	•	•	•	•	•			
	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	
	US,	UZ,	VC,	VN,	ZA,	ZM,	zw										
RW:	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	
	IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	
	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	G₩,	ML,	MR,	ΝE,	SN,	TD,	ΤG,	BW,	GH,	
	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
	KG,	KΖ,	MD,	RU,	ТJ,	TM											

PRIORITY APPLN. INFO.: JP 2005-260272 A 20050908

AB An organic electroluminescent device is described comprising an anode, a cathode, and at least a first layer, a second layer, and a third layer provided between the anode and the cathode; at least one of the first to third layers including a phosphorescent compound, at least one of the first to third layers being an emitting layer, and compds. resp. forming the first to third layers and having the largest ionization potentials of the resp. layers having an ionization potential of 5.7 eV or more and differing in the ionization potential in an amount of less than 1.0 eV.

IT 862423-40-3

RL: TEM (Technical or engineered material use); USES (Uses) (electron transporting layer; organic electroluminescence device having layers of phosphorescent compound)

RN 862423-40-3 CAPLUS

CN 9H-Carbazole, 9,9'-[5'-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1''-terphenyl]-4,4''-diyl]bis- (CA INDEX NAME)

L29 ANSWER 7 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1228974 CAPLUS

DOCUMENT NUMBER: 145:505475

TITLE: Preparation of azinamines as modulators of heat shock

protein 90 (Hsp90).

INVENTOR(S): Chessari, Gianni; Congreve, Miles Stuart; Callaghan,

Owen; Cowan, Suzanna Ruth; Murray, Christopher

William; Woolford, Alison Jo-Anne; O'Brien, Michael

Alistair; Woodhead, Andrew James Astex Therapeutics Limited, UK

SOURCE: PCT Int. Appl., 159pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA	TENT	NO.			KIND DATE					APPL	ICAT		DATE					
	2006 2006				A2 A3		20061123 20071011		,	WO 2	006-	GB18	51	20060519				
	W: AE, AG, AL, CN, CO, CR,							•	•									
		•			,	,	ID,	,	•	•		,	,	•	•		•	
		•			,	,	LT,	•		•	•	,	,				•	
		•		•	•	•	NZ, TJ,	•	•	•	•	•	•	•	•	•	•	
		,	- /	,	ZM,		~-											
	RW:						CZ, MC,										•	
							GN,	•			•							
				,			NA,		•	•	,	UG,	ZM,	ZW,	AM,	AZ,	BY,	
PRIORIT	Y APP				, RU, TJ, TM, AP,					GB 2	005-			A 20050519				
							113 D D D D D D D D D D D D D D D D D D					6826	87P	P 20050519				

OTHER SOURCE(S): MARPAT 145:505475

GΙ

AB Title compds. [I; A = N, CR3; R1 = (substituted) mono- or bicyclic (hetero)cyclic ring of 5-10 ring members of which  $\leq 2$  ring members may be N, O, S and the remainder are C atoms; R2 = H, halo, CF3, cyano, amino, (substituted) alicyclic hydrocarbyl, etc.; R3 = R2, (substituted) monocyclic (hetero)cyclyl], were prepared Thus, 4-(2-chloro-6-methoxyphenyl)-6-methylpyrimidin-2-ylamine (prepared from 2-amino-4-chloro-6-methylpyrimidine and 2-chloro-6-methoxyphenylboronic acid) showed a Kd value of <math><1  $\mu$ M in isothermal titration calorimetry expts. using Hsp90 $\alpha$ .

## 10/513699

IT 915070-13-2P 915070-14-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of azinamines as modulators of heat shock protein 90)

RN 915070-13-2 CAPLUS

CN 2-Pyrimidinamine, 4-chloro-6-(2,4-dimethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 915070-14-3 CAPLUS

CN 2-Pyrimidinamine, 4-(3'-bromo-2,2',4,6'-tetramethoxy[1,1'-biphenyl]-3-yl)-6-chloro- (CA INDEX NAME)

<12/04/2007>

L29 ANSWER 8 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:632732 CAPLUS

DOCUMENT NUMBER: 145:103546

TITLE: Preparation of biscarbazole derivatives as charge-transporting materials, and organic

electroluminescent elements

INVENTOR(S): Yabe, Masayoshi; Sato, Hideki

PATENT ASSIGNEE(S): Pioneer Corporation, Japan; Mitsubishi Chemical

Corporation

SOURCE: PCT Int. Appl., 137 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P.F	TENT	NO.			KIND DATE					APPLICATION NO.							DATE			
WC	2006	 0679	 76		A1	_	2006	0629		uo Т	2005-	 JР22	 635		2	209				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB	, BG,	BR,	BW,	BY,	BZ,	CA,	CH,			
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, EC,	EE,	EG,	ES,	FI,	GB,	GD,			
		GE,	GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS	, KE,	KG,	KM,	KN,	KΡ,	KR,	KΖ,			
		LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA	, MD,	MG,	MK,	MN,	MW,	MX,	MΖ,			
					,						, PT,									
		SK,	SL,	SM,	SY,	ТJ,	TM,	TN,	TR,	TT	, TZ,	UA,	UG,	US,	UZ,	VC,	VN,			
		YU,	ZA,	ZM,	ZW															
	RW:										, ES,									
		IS,	ΙΤ,	LT,	LU,	LV,	MC,	ΝL,	PL,	PΤ	, RO,	SE,	SI,	SK,	TR,	BF,	ВJ,			
		CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML	, MR,	NE,	SN,	TD,	ΤG,	BW,	GH,			
						,	•	SD,	SL,	SZ	, TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,			
					RU,															
									JP 2005-355790											
EF	1829	871			A1		2007	0905		EΡ	2005-	8147	48		20051209					
	R:																			
	1010										2005-					0051				
	2007				A		2007	0906			2007-					0070				
PRIORI	ORITY APPLN. INFO.:										2004-									
									WO 2005-JP22635						W 2	0051	209			
OTHER S	HER SOURCE(S):					REAC	CT 14	5 <b>:</b> 10	3546	; M	ARPAT	145	:103	546						

AΒ Organic compds. represented by the following formula [I; Cz1, Cz2 = carbazolyl; Z = a direct bond or any connecting group which enables the nitrogen atom of the carbazole ring in Cz1 to be conjugated with the nitrogen atom of the carbazole ring in Cz2; Q = a direct bond connected to G in the following formula Q1; ring B1 = a 6-membered aromatic heterocycle having n nitrogen atom(s) as a heteroatom, provided that n is an integer of 1-3; G is connected to Q, it is a direct bond or any connecting group which each is connected to Q; G is bonded to any of the carbon atoms located in the ortho and para positions to a nitrogen atom of the ring B1; when G is not connected to Q, it is an aromatic hydrocarbon group; m = aninteger of 3-5] are prepared These compds. combines excellent hole-transporting properties with excellent electron-transporting properties and has excellent long-term resistance to elec. oxidation/reduction and a high triplet excitation level. A charge-transporting material and an organic electroluminescent element which comprise or employ the organic compound I are also disclosed. Thus, aldol condensation of 2,5-difluorobenzaldehyde with acetophenone in a mixture of concentrated H2SO4

and

THF at 35° for 7 h gave 1-phenyl-3-(2,5-difluorophenyl)-2-propen-1- one which underwent cyclocondensation with 1-phenacylpyridinium bromide and ammonium acetate in a mixture of AcOH ad DMF under refluxing for 6 h to give 4-(2,5-difluorophenyl)-2,6-diphenylpyridine (II). Carbazole was treated with NaH in DMF at 80° for 60 min and condensed with II under refluxing for 3 h to give 4-[2,5-bis(carbazol-9-yl)phenyl]-2,6-diphenylpyridine (III). An electroluminescent device with a luminescent layer comprising III as a main component (host material) showed excellent life property (working life of 1.00 at 2.500 cd/m2).

IT 895146-85-7P 895146-87-9P 895146-89-1P 895147-12-3P 895147-14-5P 895147-18-9P

RL: DEV (Device component use); SPN (Synthetic preparation); TEM

(Technical or engineered material use); PREP (Preparation); USES (Uses) (preparation of biscarbazole derivs. as charge-transporting materials, and organic electroluminescent elements)

RN 895146-85-7 CAPLUS

CN 9H-Carbazole, 9,9',9'',9'''-[(2-phenyl-4,6-pyrimidinediyl)bis([1,1':3',1'':3'',1'''-quaterphenyl]-3''',2,5-triyl)]tetrakis- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 1-B

RN 895146-87-9 CAPLUS

CN 9H-Carbazole, 9,9'-[3'''-[4-[3''-(4,6-diphenyl-2-pyridinyl)[1,1':3',1''-terphenyl]-3-yl]-6-phenyl-2-pyrimidinyl][1,1':3',1'':3'',1'''-quaterphenyl]-2,5-diyl]bis- (9CI) (CA INDEX NAME)

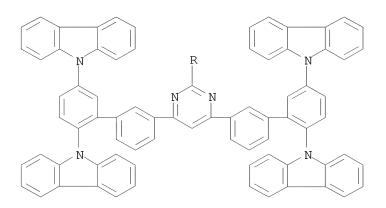
PAGE 1-A

PAGE 1-B

RN 895146-89-1 CAPLUS

CN 9H-Carbazole, 9,9',9'',9''',9''''-[2,4,6-pyrimidinetriyltris([1,1'-biphenyl]-3',2,5-triyl)]hexakis- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

RN 895147-12-3 CAPLUS

CN 9H-Carbazole, 9,9',9'',9'''-[(2-phenyl-4,6-pyrimidinediyl)bis([1,1'-biphenyl]-3',2,5-triyl)]tetrakis- (9CI) (CA INDEX NAME)

RN 895147-14-5 CAPLUS

CN 9H-Carbazole, 9-[2,5,6-tri-9H-carbazol-9-yl-3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

<12/04/2007>

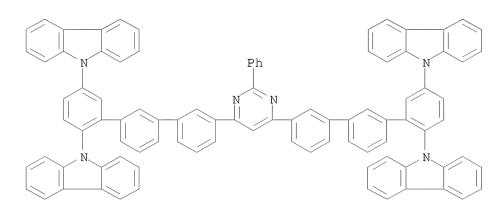
Erich Leese

PAGE 1-A

PAGE 2-A

RN 895147-18-9 CAPLUS

CN 9H-Carbazole, 9,9',9'',9'''-[(2-phenyl-4,6-pyrimidinediyl)bis([1,1':3',1''-terphenyl]-3'',2,5-triyl)]tetrakis- (9CI) (CA INDEX NAME)



REFERENCE COUNT:

16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 9 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:1004849 CAPLUS DOCUMENT NUMBER: 143:295331 TITLE: Organic electroluminescent material used for organic electroluminescent device INVENTOR(S): Ikeda, Kiyoshi; Tomita, Seiji; Arakane, Takashi; Ito, Mitsunori PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan SOURCE: PCT Int. Appl., 76 pp. CODEN: PIXXD2 DOCUMENT TYPE: Patent LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION: PATENT NO. KIND DATE APPLICATION NO. ----\_\_\_\_\_\_ WO 2005085387 A1 20050915 WO 2005-JP3783 20050304 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, MI, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG 20061122 EP 2005-720055 A1 EP 1724323 20050304 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR CN 1934213 A 20070321 CN 2005-80007533 20050304 A 20070706 IN 2006-CN3250 A 20070316 KR 2006-718427 A1 20070816 US 2007-591908 IN 2006CN03250 20060907 KR 2007030759 20060908 US 20070190355 US 2007-591908 20070118 JP 2004-64004 A 20040308 WO 2005-JP3783 W 20050304 20070118 PRIORITY APPLN. INFO.: OTHER SOURCE(S): MARPAT 143:295331 A material for organic electroluminescent (EL) device, comprising a compound of specified structure having a nitrogenous ring. Further, there is provided an organic EL device comprising a neg. electrode and a pos. electrode and, interposed there-between, one or two or more organic thin-film layers including at least a light-emitting layer, wherein at least one of the organic thin-film layers contains the above material for organic EL device. The above device containing the material is capable of realizing high luminous efficiency and thermostability and prolonged service life. 650606-89-6P 862423-42-5P 864377-27-5P

<12/04/2007> Erich Leese

preparation); PREP (Preparation); USES (Uses)

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic

(organic electroluminescent material used for organic electroluminescent

Pyrimidine, 2,4,6-tris([1,1':3',1''-terphenyl]-5'-yl)- (9CI) (CA INDEX

864377-29-7P 864377-30-0P 864377-39-9P

864377-43-5P

device)

650606-89-6 CAPLUS

RN

NAME)

RN 862423-42-5 CAPLUS
CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-3-yl](CA INDEX NAME)

RN 864377-27-5 CAPLUS
CN 9H-Carbazole, 9-[5'-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1''-terphenyl]-4yl]- (9CI) (CA INDEX NAME)

RN 864377-29-7 CAPLUS

CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 864377-30-0 CAPLUS

CN 9H-Carbazole, 9-[3''-(2,6-diphenyl-4-pyrimidinyl)[1,1':4',1''-terphenyl]-4-yl]- (9CI) (CA INDEX NAME)

RN 864377-39-9 CAPLUS

CN Pyrimidine, 4,4'-[1,1'-biphenyl]-3,5-diylbis[2,6-diphenyl- (9CI) (CA INDEX NAME)

10/513699

RN 864377-43-5 CAPLUS

CN 9H-Carbazole, 9-[3',5'-bis(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

IT 864377-38-8

RL: RCT (Reactant); RACT (Reactant or reagent)
(organic electroluminescent material used for organic electroluminescent device)

RN 864377-38-8 CAPLUS

CN 2-Propen-1-one, 3-[5-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-3-yl]-1-phenyl- (CA INDEX NAME)

IT 864377-26-4P 864377-37-7P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

## 10/513699

(Reactant or reagent)

(organic electroluminescent material used for organic electroluminescent device)

RN 864377-26-4 CAPLUS

CN Pyrimidine, 4-(5-bromo[1,1'-biphenyl]-3-yl)-2,6-diphenyl- (CA INDEX NAME)

RN 864377-37-7 CAPLUS

CN [1,1'-Biphenyl]-3-carboxaldehyde, 5-(2,6-diphenyl-4-pyrimidinyl)- (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 10 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1004351 CAPLUS

DOCUMENT NUMBER: 143:306328

TITLE: Preparation of 4-pyrimidinamines as neuroprotectants. INVENTOR(S): Benjamin, Elfrida R.; Brown, Frank K.; Zivin, Robert Allan; McMillan, Michael Kurt; Zhong, Zhong; Reitz,

Allan; McMillan, Michael Kurt; Zhong, Zhong; Ro

Allen B.; Ross, Tina Morgan

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 45 pp., Cont.-in-part of U.S.

Ser. No. 922,874, abandoned.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
US 20050203092	A1	20050915	US 2004-987562	20041112			
US 20030008883	A1	20030109	US 2001-922874	20010806			
US 20030212079	A1	20031113	US 2003-396158	20030325			
US 20040006094	A1	20040108	US 2003-395971	20030325			
PRIORITY APPLN. INFO.:			US 2000-223791P P	20000808			
			US 2001-922874 B2	20010806			

OTHER SOURCE(S): MARPAT 143:306328

GΙ

AΒ This invention provides novel neuroprotective 4-pyrimidineamine derivs. (I, variables defined below) and neuroprotective pharmaceutical compns. comprising 4-pyrimidinamines. This invention also provides methods of using these compns. to prevent ischemic cell death, particularly neuronal cell death, and reduce the likelihood of neuronal cell death in a subject due to a traumatic event. Thus, a mixture of N-(2-aminoethyl)-N'-(6biphenyl-3-ylpyrimidin-4-yl)-N-ethylbenzene-1,4-diamine (preparation given), N-benzoylalanine, diisopropylethylamine, HBTU, and DMF was stirred overnight at room temperature to give N-[1-[[2-[4-(6-biphenyl-3-ylpyrimidin-4ylamino)phenyl]ethylamino]ethylcarbamoyl]ethyl]benzamide. Tested compds. in a differentiated P19 cell assay using 3 mM glutamate showed neuroprotectant activity with IC50 = 0.07  $\mu M$  to >1  $\mu M$ . For I the variables are: R20 = disubstituted amino; R21 = H, alkyl, aryl, aralkyl, alkylcarbonyl, arylcarbonyl and aralkylcarbonyl, wherein the aryl portion is optionally substituted; p = 0-3; q = 0-3; R22 and R23 = halogen, alkyl, alkoxy, amino, alkylamino, dialkylamino, nitro, cyano, carboxy, alkoxycarbonyl, aryloxycarbonyl, aminocarbonyl, alkylaminocarbonyl and dialkylaminocarbonyl.

Ι

IT 397850-40-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397850-40-7 CAPLUS

CN 1,4-Benzenediamine, N-(2-aminoethyl)-N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl- (9CI) (CA INDEX NAME)

IT 397851-04-6

RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-04-6 CAPLUS

CN Ethanol, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylam inol- (CA INDEX NAME)

IT 397850-34-9P 397850-35-0P 397850-36-1P 397850-37-2P 397850-38-3P 397850-39-4P 397850-41-8P 397850-42-9P 397850-43-0P 397850-44-1P 397850-45-2P 397850-46-3P 397850-47-4P 397850-48-5P 397850-49-6P 397850-50-9P 397850-51-0P 397850-52-1P 397850-53-2P 397850-54-3P 397850-55-4P 397850-56-5P 397850-57-6P 397850-58-7P 397850-59-8P 397850-60-1P 397850-61-2P 397850-62-3P 397850-63-4P 397850-64-5P 397850-65-6P 397850-66-7P 397850-67-8P 397850-68-9P 397850-69-0P 397850-70-3P 397850-71-4P 397850-72-5P 397850-73-6P 397850-74-7P 397850-75-8P 397850-76-9P 397850-77-0P 397850-78-1P 397850-79-2P 397850-80-5P 397850-81-6P 397850-82-7P 397850-83-8P 397850-84-9P 397850-85-0P 397850-86-1P 397850-87-2P 397850-88-3P 397850-89-4P 397850-90-7P 397850-91-8P 397850-92-9P 397850-93-0P 397850-94-1P 397850-95-2P 397850-96-3P 397850-97-4P 397850-98-5P 397850-99-6P 397851-00-2P

## 10/513699

397851-01-3P 397851-02-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397850-34-9 CAPLUS

CN Benzamide, N-[2-[[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]amino]-1-methyl-2-oxoethyl]-(CA INDEX NAME)

RN 397850-35-0 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

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RN 397850-36-1 CAPLUS

CN Hexadecanamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{O} \\ \mid & \text{N-CH}_2\text{--}\text{CH}_2\text{--}\text{NH-C----} \text{(CH}_2)_{14}\text{-----} \text{Me} \\ \end{array}$$

RN 397850-37-2 CAPLUS

CN Butanamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[(1-oxobutyl)amino]ethyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{Et} & \text{O} \\ & & \text{N-CH}_2\text{--}\text{CH}_2\text{--}\text{NH-C--}\text{Pr-n} \\ \end{array}$$

RN 397850-38-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(cyclohexylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} \\ & \text{N-CH}_2\text{-CH}_2\text{-NH-CH}_2 \\ \\ \text{Ph} \end{array}$$

RN 397850-39-4 CAPLUS

CN Alanine, N-benzoyl-, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl ester (CA INDEX NAME)

RN 397850-41-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-(dimethylamino)ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-42-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-y1-4-pyrimidiny1)-N-ethyl-N-[2-[(3-methoxypropy1)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \\ \mid & \\ \text{N-CH}_2\text{-CH}_2\text{-NH-(CH}_2)_3\text{-OMe} \end{array}$$

RN 397850-43-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3-chlorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-44-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2,4-dimethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-45-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2-ethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-46-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-47-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2,5-difluorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-48-5 CAPLUS

[[[(1R, 4aS, 10aR)-1, 2, 3, 4, 4a, 9, 10, 10a-octahydro-1, 4a-dimethyl-7-(1-methylethyl)-1-phenanthrenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 397850-49-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(2-phenylethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{Et} & & \operatorname{Et} \\ & \operatorname{N-CH_2-CH_2-NH-CH_2-CH_2-Ph} \\ & \operatorname{N-CH_2-CH_2-NH-CH_2-CH_2-Ph} \\ & \operatorname{Ph} & & \operatorname{N-CH_2-CH_2-NH-CH_2-CH_2-Ph} \\ \end{array}$$

RN 397850-50-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3,4-dimethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-51-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[3-yl-4-pyrimidinyl]]

(diethylamino)propyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-52-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(4-bromo-2-pyridinyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-53-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(dimethylamino)ethyl](phenylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-54-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[butyl(phenylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-55-4 CAPLUS

CN 1,4-Benzenediamine, N-[2-([1,1'-biphenyl]-4-ylamino)ethyl]-N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-56-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-y1-4-pyrimidiny1)-N-ethy1-N-[2-[(2-furany1methy1)amino]ethy1]- (9CI) (CA INDEX NAME)

RN 397850-57-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(3-iodophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-58-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2,2,2-trifluoroethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-59-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3,4-difluorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-60-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(2-thienyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} \\ & \text{N-CH}_2\text{-CH}_2\text{-NH-CH}_2\text{-CH}_2 \end{array}$$

RN 397850-61-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(3,5-dimethyl-2-pyridinyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-62-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-phenylethyl)(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{CH}_2\text{-Ph} \\ \mid & \mid & \mid \\ \text{N-CH}_2\text{-CH}_2\text{-N-CH}_2\text{-CH}_2\text{-Ph} \\ \end{array}$$

RN 397850-63-4 CAPLUS

CN Acetamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-2-ethoxy-N-(phenylmethyl)- (CA INDEX NAME)

RN 397850-64-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-methoxyphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-65-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(4-bromophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-66-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[[3,5-bis(trifluoromethyl)phenyl]methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-67-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[2-(3-methoxyphenyl)ethyl]amino]ethyl]-(9CI) (CA INDEX NAME)

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RN 397850-68-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(3,4,5-trimethoxyphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-69-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(4-methoxyphenyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

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\_ OMe

RN 397850-70-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(1H-imidazol-4-yl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{H} \\ \text{N} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{CH}_2 \\ \end{array}$$

RN 397850-71-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[2-(trifluoromethyl)phenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-72-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-73-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(3-methoxyphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-74-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(3-methylphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{Et} & & \\ \operatorname{I} & \operatorname{CH_2-CH_2-NH-CH_2} \\ \operatorname{Ph} & & \end{array}$$

RN 397850-75-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-yl-4-pyrimidiny1)-N-[2-[[(3,5-dimethoxypheny1)methy1]amino]ethy1]-N-ethy1- (9CI) (CA INDEX NAME)

RN 397850-76-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2-bromophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-77-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(4-bromophenyl)ethyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

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RN 397850-78-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(4-fluorophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-79-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2- [(1-naphthalenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

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RN 397850-80-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-phenoxyethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-81-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[4-(trifluoromethyl)phenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-82-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-(butylamino)ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-83-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[bis(phenylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-84-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(3-pyridinylamino)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-85-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-methylphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-86-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(2-fluorophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-87-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-88-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[ethyl(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} & \text{CH}_2\text{--}\text{Ph} \\ & & \\ N\text{--}\text{CH}_2\text{--}\text{CH}_2\text{--}\text{N--}\text{Et} \\ \end{array}$$

RN 397850-89-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-90-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-91-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(1H-imidazol-1-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-92-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-(3,4-dihydro-2(1H)-isoquinolinyl)ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-93-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(hexahydro-1H-azepin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-94-1 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ N \end{array}$$

RN 397850-95-2 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

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RN 397850-96-3 CAPLUS

CN Ethanol, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]-, benzoate (ester) (9CI) (CA INDEX NAME)

RN 397850-97-4 CAPLUS

CN Benzeneacetamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- $\alpha$ -chloro- (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{O C1} \\ \mid & \mid & \mid \\ \text{N-CH}_2\text{-CH}_2\text{-NH-C-CH-Ph} \\ \end{array}$$
 Ph

<12/04/2007>

Erich Leese

RN 397850-98-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-6-nitro- (CA INDEX NAME)

RN 397850-99-6 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- (CA INDEX NAME)

RN 397851-00-2 CAPLUS

CN Benzamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-4-butoxy- (CA INDEX NAME)

RN 397851-01-3 CAPLUS

CN Benzamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[[4-(trifluoromethyl)benzoyl]amino]ethyl]amino]phenyl]-4-(trifluoromethyl)-(CA INDEX NAME)

RN 397851-02-4 CAPLUS

CN Benzamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[(3-fluorobenzoyl)amino]ethyl]amino]phenyl]-3-fluoro- (CA INDEX NAME)

IT 397851-07-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-07-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N,N-dimethyl-(9CI) (CA INDEX NAME)

IT 397851-03-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-03-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-(2-chloroethyl)-N-ethyl- (9CI) (CA INDEX NAME)

L29 ANSWER 11 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:903173 CAPLUS

DOCUMENT NUMBER: 143:219295

TITLE: Organic electroluminescent device

INVENTOR(S): Matsuura, Masahide; Hosokawa, Chishio; Iwakuma,

Toshihiro; Yamamichi, Keiko Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 35 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT ASSIGNEE(S):

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	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	IS,	IT,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	ΤG												
EI	7 1718	122			A1		20061102			EP 2005-709854				20050208				
	R:	BE,	DE,	FR,	GB,	NL												
Cl	1918	946			A		2007	0221	CN 2005-80004202						20050208			
US	US 20070159083			<b>A</b> 1		2007		US 2	007-	5887	20070119							
PRIORI	TY APP	LN.	INFO	.:						JP 2	004 -	3605	1		A 2	0040	213	
									,	WO 2	005-	JP18	02	1	W 2	0050	208	

- AB The invention relates to an organic electroluminescent device comprising a plurality of light-emitting layers between cathodes and an anode, where each of the light-emitting layers contains a host material having a triplet energy gap of not less than 2.52 eV and not more than 3.7 eV and a luminescent dopant with triplet contribution which is composed of a metal complex having a heavy metal.
- IT 862423-40-3 862424-73-5
  - RL: DEV (Device component use); USES (Uses) (organic electroluminescent device)
- RN 862423-40-3 CAPLUS
- CN 9H-Carbazole, 9,9'-[5'-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1''-terphenyl]-4,4''-diyl]bis- (CA INDEX NAME)

RN 862424-73-5 CAPLUS

CN 9H-Carbazole, 9,9'-[5'-(2-phenyl-6-(2-pyridinyl)-4-pyrimidinyl)[1,1':3',1''-terphenyl]-4,4''-diyl]bis- (9CI) (CA INDEX NAME)

REFERENCE COUNT:

12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 12 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:823992 CAPLUS

DOCUMENT NUMBER: 143:219260

TITLE: Organic electroluminescent device

INVENTOR(S): Matsuura, Masahide; Iwakuma, Toshihiro; Yamamichi,

Keiko; Hosokawa, Chishio

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

P	PATENT NO.					KIND DATE			-	APPL	ICAT		DATE						
<i>M</i>	10	2005076669			A1	A1 20050818				 WO 2	005-	JP17	20050208						
		W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
	GE, GH, GM,		GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,			
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,	
	NO, NZ, OM,		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,			
	TJ, TM, TN,		TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW			
		RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
			AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
			EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,	
			RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	
			MR,	NE,	SN,	TD,	ΤG												
E	ΞP	1718	121			A1		20061102			EP 2	CP 2005-709851				20050208			
		R:	BE,	DE,	FR,	GB,	NL												
C	CN	1918	947			A		20070221			CN 2005-80004332					20050208			
U	US 20070257600			A1		2007		US 2	007-	5885		20070413							
PRIORI	TY	APP	LN.	INFO	.:					1	JP 2004-32542					A 20040209			
										•	WO 2	005-	JP17	99	1	₩ 2	0050	208	

- AB Disclosed is an organic EL device having a multilayer structure wherein at least a light-emitting layer and an electron transport layer are arranged between cathodes and an anode is characterized in that the host material constituting the light-emitting layer has a triplet energy gap (EgT) of not less than 2.52 eV and not more than 3.7 eV, an electron-transporting material constituting the electron transport layer is different from the host material and has a hole transporting ability, and the light-emitting layer further contains a metal complex compound having phosphorescence and containing a heavy metal.
- IT 862423-40-3 862423-42-5
  - RL: DEV (Device component use); USES (Uses) (organic electroluminescent device)
- RN 862423-40-3 CAPLUS
- CN 9H-Carbazole, 9,9'-[5'-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1''-terphenyl]-4,4''-diyl]bis- (CA INDEX NAME)

RN 862423-42-5 CAPLUS
CN 9H-Carbazole, 9-[3'-(2,6-diphenyl-4-pyrimidinyl)[1,1'-biphenyl]-3-yl](CA INDEX NAME)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

## 10/513699

L29 ANSWER 13 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:636143 CAPLUS

DOCUMENT NUMBER: 143:205790

TITLE: 2-(2-Furany1)-7-pheny1[1,2,4]triazolo[1,5-c]pyrimidin-

5-amine analogs: Highly potent, orally active,

adenosine A2A antagonists. Part 1

AUTHOR(S): Matasi, Julius J.; Caldwell, John P.; Zhang, Hongtao;

Fawzi, Ahmad; Cohen-Williams, Mary E.; Varty, Geoffrey

Ι

B.; Tulshian, Deen B.

CORPORATE SOURCE: Department of Medicinal Chemistry-CV & CNS,

Schering-Plough Research Institute, Kenilworth, NJ,

07033, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2005),

15(16), 3670-3674

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

OTHER SOURCE(S): CASREACT 143:205790

GΙ

$$\begin{array}{c|c} & & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\ & & \\$$

AB The structure-activity relationship of this novel class of compds. based on 2-(2-furanyl)-7-phenyl[1,2,4]-triazolo[1,5-c]pyrimidin-5-amine and its analogs was evaluated for their in vitro and in vivo adenosine A2A receptor antagonism. Several compds. displayed oral activity at 3 mg/kg in a rat catalepsy model. Specifically, compound (I) displayed an excellent in vitro profile, as well as a highly promising in vivo profile.

IT 862168-19-2P 862168-42-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)

(furanyl-triazolopyrimidin analogs as highly potent, orally active, adenosine A2A antagonists)

RN 862168-19-2 CAPLUS

CN 2-Pyrimidinamine, 4-[1,1'-biphenyl]-3-yl-6-chloro- (CA INDEX NAME)

## 10/513699

RN 862168-42-1 CAPLUS

CN 2-Furancarboxylic acid, 2-(2-amino-6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)hydrazide (CA INDEX NAME)

REFERENCE COUNT:

21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 14 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:540732 CAPLUS

DOCUMENT NUMBER: 143:86370

TITLE: Organic compounds having low symmetry for

electroluminescent device

INVENTOR(S): Iwakuma, Toshihiro; Tomita, Seiji; Ito, Mitsunori

PATENT ASSIGNEE(S): Idemitsu Kosan Co., Ltd., Japan

SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIND DATE					APPL	ICAT		DATE					
WC	2005057987			A1	_	2005	0623		 WO 2	004-		20041213						
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,	
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,	
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NΙ,	
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW	
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	
		EE,	ES,	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IS,	ΙΤ,	LT,	LU,	MC,	NL,	PL,	PT,	
		RO,	SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	
		MR,	NE,	SN,	TD,	ΤG												
EP	1696	708			A1		2006	0830		EP 2	004-	8073	20041213					
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	ΙΤ,	LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	FΙ,	RO,	CY,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	IS			
CN	1895	004			Α		2007	0110		CN 2	004-	8003	7470		20041213			
IN	IN 2006CN02124						2007	0706		IN 2	006-	CN21	24		20060615			
US	2007	0104	976		A1		2007	0510		US 2	007-		20070105					
PRIORIT	Y APP	LN.	INFO	.:						JP 2	003-	Ž	A 20031215					
										WO 2	004-	JP189	I	W 20041213				

AB Disclosed is a material for organic electroluminescent devices which is composed of a compound having a specific structure which is low in symmetry. An organic electroluminescent device comprising an organic thin film layer which

is composed of one or more layers including at least a light-emitting layer and sandwiched between an anode and a cathode is also disclosed wherein at least one layer of the organic thin film layer contains the above-described material for organic electroluminescent devices. The material for organic electroluminescent devices enables to obtain an organic electroluminescent device which is free from pixel defects and has a high luminous efficiency, excellent heat resistance and long life.

IT 854952-57-1P

RL: DEV (Device component use); PRP (Properties); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(organic compds. having low symmetry for electroluminescent device)

RN 854952-57-1 CAPLUS

CN 9H-Carbazole, 9,9'-[5''-(2,6-diphenyl-4-pyrimidinyl)[1,1':3',1'':3'',1''': 3''',1''''-quinquephenyl]-4,4''''-diyl]bis- (9CI) (CA INDEX NAME)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 15 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:523452 CAPLUS

DOCUMENT NUMBER: 143:59997

TITLE: Preparation of 2-aminopyrimidine derivatives as

histamine H4 antagonists for the treatment of asthma

A 20031205

INVENTOR(S): Sato, Hiroki; Tanaka, Kazuho; Shimazaki, Makoto;

Urbahns, Klaus; Sakai, Katsuya; Gantner, Florian;

Bacon, Kevin

PATENT ASSIGNEE(S): Bayer Healthcare A.-G., Germany

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.					KIN	D	DATE			APPL	ICAT	ION :	DATE				
WO 2005054239				 A1	_	2005	 0616		 WO 2	004-		20041124					
	W:	ΑE,	AG,				AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KΖ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	ΝI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	KΕ,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,
		EE,	ES,	FΙ,	FR,	GΒ,	GR,	HU,	ΙE,	IS,	ΙT,	LU,	MC,	NL,	PL,	PT,	RO,
		SE,	SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,
		NE,	SN,	TD,	ΤG												

PRIORITY APPLN. INFO.: EP 2003-28102

OTHER SOURCE(S): CASREACT 143:59997; MARPAT 143:59997

GΙ

AB Title compds. I [R1 = bicyclic fused pyrrolidine, 4-aminoazetidinyl, etc.; R2 = H, halo, alkyl; R3 = (hetero)aryl] are prepared For instance, 4-[(4aR,7aR)-octahydro-6H-pyrrolo[3,4-b]pyridin-6-yl]-6-phenylpyrimidin-2-amine dihydrochloride is prepared in 3 steps from 2-amino-4,6-dichloropyrimidine, (4aR,7aR)-octahydro-1H-pyrrolo[3,4-b]pyridine and phenylboronic acid. In assays of histamine H4 antagonism, example compds. have IC50 in the range of 20 - 500 nM. I are useful in the treatment of asthma, rhinitis, allergic diseases, chronic obstructed pulmonary disease (COPD), atherosclerosis, rheumatoid arthritis, thromboembolic diseases or disorders and urol. diseases or disorders.

IT 854036-93-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-aminopyrimidine derivs. as histamine H4 antagonists for treatment of asthma)

RN 854036-93-4 CAPLUS

CN 2-Pyrimidinamine, 4-[1,1'-biphenyl]-3-yl-6-[(4aR,7aR)-octahydro-6H-pyrrolo[3,4-b]pyridin-6-yl]-, hydrochloride (1:3) (CA INDEX NAME)

Absolute stereochemistry.

●3 HCl

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 16 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:116083 CAPLUS

DOCUMENT NUMBER: 142:198092

TITLE: A preparation of 2-aminopyrimidine derivatives, useful

as histamine H4 receptor antagonists

INVENTOR(S): Sato, Hiroki; Fukushima, Keiko; Shimazaki, Makoto;

Urbahns, Klaus; Sakai, Katsuya; Gantner, Florian;

Bacon, Kevin

PATENT ASSIGNEE(S): Bayer Healthcare AG, Germany

SOURCE: Eur. Pat. Appl., 38 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	TENT	NO.			KIND DATE					APPL	DATE								
EP	EP 1505064				A1 20050209				EP 2	003-	20030805								
	R:	ΑT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
		ΙE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	SK			
WO	WO 2005014556						2005	0217		WO 2	004-	EP82.	25		20040723				
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,		
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FΙ,	GB,	GD,		
		GE,	GH,	GM,	HR,	HU,	ID,	ΙL,	IN,	IS,	JP,	ΚE,	KG,	KΡ,	KR,	KΖ,	LC,		
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,		
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,		
		ТJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW		
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,		
		ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,		
		EE,	ES,	FI,	FR,	GB,	GR,	HU,	ΙE,	ΙΤ,	LU,	MC,	NL,	PL,	PT,	RO,	SE,		
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,		
		SN,	TD,	TG															
EP	EP 1654237						2006	0510		EP 2	004-		20040723						
	R:	DE,	ES,	FR,	GB,	ΙT													
PRIORIT	RIORITY APPLN. INFO.:								EP 2003-17810						A 20030805				
							WO 2004-EP8225								W 2	0040	723		
OTHER SO							CASREACT 142:198092; MARPAT 142:198092												

## \* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The invention relates to a preparation of novel 2-aminopyrimidine derivs. of formula I [wherein: R1 is pyrrolidine or piperazine derivative attached to the pyrimidine ring via nitrogen atom; R2 is Ph or naphthyl derivative], useful as histamine H4 receptor antagonists. The 2-aminopyrimidine derivs. of the present invention are useful for treatment and prophylaxis of diseases such as asthma, rhinitis, allergic diseases, chronic obstructed pulmonary disease (CORD), atherosclerosis, and rheumatoid arthritis. For instance, 2-aminopyrimidine derivative II•3HCl was prepared via amination of 2-amino-4,6-dichloropyrimidine by aminopyrrolidine derivative III, phenylation of the obtained amino(aminopyrrolidinyl)pyrimidine derivative by PhB(OH)2, and subsequent N-cleavage (yields: amination - 66%, phenylation - 89%). For instance, IC50 for the invention compound IV•3HCl was < 20 nM.

IT 838872-08-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2-aminopyrimidine derivs. useful as histamine H4 receptor antagonists)

RN 838872-08-5 CAPLUS

CN 2-Pyrimidinamine, 4-[1,1'-biphenyl]-3-yl-6-(4-methyl-1-piperazinyl)-, hydrochloride (1:3) (CA INDEX NAME)

●3 HCl

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 17 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:817651 CAPLUS

DOCUMENT NUMBER: 141:332206

TITLE: Preparation of biaryl substituted 6-membered

heterocycles as sodium channel blockers

INVENTOR(S): Chakravarty, Prasun K.; Fisher, Michael H.; Parsons,

William H.; Liang, Jun; Zhou, Bishan

PATENT ASSIGNEE(S): Merck & Co., Inc., USA SOURCE: PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA'	TENT 1	.O.			KINI	APPLICATION NO.								DATE				
						WO 2004-US8532								20040319				
WO	2004084824			A3		20050331												
	W:	ΑE,	ΑG,	ΑL,	ΑM,	ΑT,	ΑU,	ΑZ,	BA,	BB	, BO	G, B	R,	BW,	BY,	BZ,	CA,	CH,
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ	, E	С, Е	Ε,	EG,	ES,	FI	GB,	GD,
		GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS	, JE	P, K	Ε,	KG,	KP,	KR	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG	, ME	К, М	N,	MW,	MX,	MZ	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU	, SC	C, S	D,	SE,	SG,	SK	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US	, U2	z, v	C,	VN,	YU,	ZA	ZM,	ZW
	RW:	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL	, SZ	Ζ, Τ	Z,	UG,	ZM,	ZW	, AM,	AZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	ΒE	, во	G, C	Η,	CY,	CZ,	DE	, DK,	EE,
		ES,	FI,	FR,	GB,	GR,	HU,	IE,	IT,	LU	, MO	C, N	L,	PL,	PT,	RO	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GΑ	., Gì	v, G	Q,	GW,	ML,	MR	, NE,	SN,
		TD,	TG				·					·		•			·	·
AU	20042	22439	92		A1		AU	2004		20040319								
CA	25196	677			A1		CA	2004		20040319								
EP	16086	622			A2		ΕP	2004		20040319								
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR	. I:	Г, L	I,	LU,	NL,	SE	MC,	PT,
																	PL,	
CN	1791				A												20040	
JP	JP 2006521357						2006	0921	JP 2006-507395									
	IN 2005DN04098																	
																	20050	
	US 20060293339 [ORITY APPLN. INFO.:							0						12P			20030	
												_		32			20040	-
HER S	HER SOURCE(S):						MARPAT 141:33220											-

OTHER SOURCE(S): MARPAT 141:332206

GΙ

The title biaryl substituted pyridine, pyrimidine and pyrazine compds. [I AB or II; H-1 = (un) substituted pyridyl, pyrimidyl, pyrazinyl; H-2 =(un) substituted pyridyl, pyrimidyl, pyrazinyl; R4, R5 = H, alkyl, alkoxy, aryloxy, etc.; R6-R8 = H, alkyl, cycloalkyl, alkoxy, etc.] which are sodium channel blockers useful for the treatment of pain (no data), were prepared E.g., a 2-step synthesis of III, starting from 2-bromo-6-methylpyridine and 3-bromophenylboronic acid, was given. Claimed pharmaceutical compns. comprise an effective amount of the instant compds. I, either alone, or in combination with one or more therapeutically active compds., and a pharmaceutically acceptable carrier. Methods of treating conditions associated with, or caused by, sodium channel activity, including, for example, acute pain, chronic pain, visceral pain, inflammatory pain, neuropathic pain, epilepsy, irritable bowel syndrome, depression, anxiety, multiple sclerosis, and bipolar disorder, comprise administering an effective amount of the present compds., either alone, or in combination with one or more other therapeutically active compds. ΙT 770723-58-5P 770723-59-6P 770724-99-7P 770725-00-3P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of biaryl substituted 6-membered heterocycles as sodium channel blockers for treatment or prevention of pain)

RN 770723-58-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-59-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-99-7 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-00-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

770723-60-9P 770723-61-0P 770723-62-1P ΙT 770723-63-2P 770723-64-3P 770723-65-4P 770723-66-5P 770723-67-6P 770723-68-7P 770723-69-8P 770723-70-1P 770723-71-2P 770723-72-3P 770723-73-4P 770723-74-5P 770723-75-6P 770723-76-7P 770723-77-8P 770723-78-9P 770723-79-0P 770723-80-3P 770723-81-4P 770723-82-5P 770723-83-6P 770723-84-7P 770723-85-8P 770723-86-9P 770723-87-0P 770723-88-1P 770723-89-2P 770723-90-5P 770723-91-6P 770723-92-7P 770723-93-8P 770723-94-9P 770723-95-0P 770723-96-1P 770723-97-2P 770723-98-3P 770723-99-4P 770724-00-0P 770724-01-1P 770724-02-2P 770724-03-3P 770724-04-4P 770724-05-5P 770724-06-6P 770724-07-7P 770724-08-8P 770724-09-9P 770724-10-2P 770724-11-3P 770724-12-4P 770724-13-5P 770724-14-6P 770724-15-7P 770724-16-8P

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770724-17-9P 770724-18-0P 770724-19-1P
770724-20-4P 770724-21-5P 770724-22-6P
770724-23-7P 770724-24-8P 770724-25-9P
770724-26-0P 770724-27-1P 770724-28-2P
770724-29-3P 770724-30-6P 770724-31-7P
770724-32-8P 770724-33-9P 770724-34-0P
770724-35-1P 770724-36-2P 770724-37-3P
770724-38-4P 770724-39-5P 770724-40-8P
770724-41-9P 770724-42-0P 770724-43-1P
770724-44-2P 770724-45-3P 770724-46-4P
770724-47-5P 770724-48-6P 770724-49-7P
770724-50-0P 770724-51-1P 770724-52-2P
770724-53-3P 770724-54-4P 770724-55-5P
770724-56-6P 770724-57-7P 770724-58-8P
770724-59-9P 770724-60-2P 770724-61-3P
770724-62-4P 770724-63-5P 770724-64-6P
770724-65-7P 770724-66-8P 770724-67-9P
770724-68-0P 770724-69-1P 770724-70-4P
770724-71-5P 770724-72-6P 770724-73-7P
770724-74-8P 770724-75-9P 770724-76-0P
770724-77-1P 770724-78-2P 770724-79-3P
770724-80-6P 770724-81-7P 770724-82-8P
770724-83-9P 770724-84-0P 770724-85-1P
770724-86-2P 770724-87-3P 770724-88-4P
770724-89-5P 770724-94-2P 770724-97-5P
770725-01-4P 770725-02-5P 770725-03-6P
770725-04-7P 770725-05-8P 770725-06-9P
770725-07-0P 770725-08-1P 770725-09-2P
770725-10-5P 770725-11-6P 770725-12-7P
770725-13-8P 770725-14-9P 770725-15-0P
770725-16-1P 770725-17-2P 770725-18-3P
770725-19-4P 770725-20-7P 770725-21-8P
770725-22-9P 770725-23-0P 770725-24-1P
770725-25-2P 770725-26-3P 770725-27-4P
770725-28-5P 770725-29-6P 770725-30-9P
770725-31-0P 770725-32-1P 770725-33-2P
770726-82-4P 770727-12-3P 770727-13-4P
770727-14-5P 770727-15-6P 770727-16-7P
770727-17-8P 770727-18-9P 770727-19-0P
770727-20-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of biaryl substituted 6-membered heterocycles as sodium channel
   blockers for treatment or prevention of pain)
770723-60-9 CAPLUS
2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-
(CA INDEX NAME)
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RN

CN

770723-61-0 CAPLUS RN

Pyrimidine, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX CN NAME)

770723-62-1 CAPLUS RN

CN 2,2'-Bipyrimidine, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN

770723-63-2 CAPLUS
Pyrimidine, 2-(methylthio)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-CN (CA INDEX NAME)

RN 770723-64-3 CAPLUS

Pyrimidine, 2-(methylsulfonyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-CN yl]- (CA INDEX NAME)

770723-65-4 CAPLUS RN

Pyrimidine, 2-(methylsulfinyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-CN yl]- (CA INDEX NAME)

RN 770723-66-5 CAPLUS

CN 2-Pyrimidinamine, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

770723-67-6 CAPLUS RN

Methanesulfonamide, N-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-CN pyrimidinyl] - (CA INDEX NAME)

770723-68-7 CAPLUS RN

Methanesulfonamide, N-(methylsulfonyl)-N-[4-[2'-(trifluoromethoxy)[1,1'-methylsulfonyl)]CN biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN

770723-69-8 CAPLUS Propanamide, 2,2-dimethyl-N-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-  $\frac{1}{2}$ CN 2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-70-1 CAPLUS

CN 2-Pyrimidinecarboxamide, N-methoxy-N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-71-2 CAPLUS

CN Methanone, 4-morpholinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-72-3 CAPLUS

CN Ethanone, 1-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-73-4 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]-, methyl ester (CA INDEX NAME)

RN 770723-74-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-cyanoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$NC-CH_2-CH_2-NH-C$$

RN 770723-75-6 CAPLUS

CN Alanine, 2-methyl-N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-76-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-77-8 CAPLUS

CN Methanone, 1-piperazinyl[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-78-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-2H-tetrazol-5-yl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-79-0 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]-, methyl ester (CA INDEX NAME)

RN 770723-80-3 CAPLUS

CN Cyclopropanecarboxylic acid, 1-[[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]amino]- (CA INDEX NAME)

RN 770723-81-4 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[1-(aminocarbonyl)cyclopropyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-82-5 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[2-(dimethylamino)ethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-83-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-84-7 CAPLUS

CN 2-Pyrimidinecarboxamide, N,N-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-85-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770723-86-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1S)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $Me$ 
 $N$ 
 $N$ 
 $CF_3$ 

RN 770723-87-0 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[2-(1-piperidiny1)ethy1]-4-[2'-(trifluoromethoxy)[1,1'-bipheny1]-3-y1]- (CA INDEX NAME)

RN 770723-88-1 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(1,1-dimethylethyl)-4-[2'- (trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-89-2 CAPLUS

CN 2-Pyrimidinecarboxamide, N-[(1R)-2-amino-1-methyl-2-oxoethyl]-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

Absolute stereochemistry.

$$H_2N$$
 $R$ 
 $N$ 
 $N$ 
 $CF_3$ 

RN 770723-90-5 CAPLUS

CN 2-Pyrrolidinecarboxamide, 1-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]carbonyl]- (CA INDEX NAME)

RN 770723-91-6 CAPLUS

CN Pyrimidine, 2,5-dimethyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770723-92-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-93-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 5-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-94-9 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-2-oxoethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-95-0 CAPLUS

CN Pyrimidine, 5-chloro-2-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-96-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 5-chloro-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-97-2 CAPLUS

CN Urea, N-[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]- (CA INDEX NAME)

RN 770723-98-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770723-99-4 CAPLUS

CN Pyrimidine, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-00-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-01-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-02-2 CAPLUS

CN Pyrimidine, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-[2-(trifluoromethyl)phenyl]- (CA INDEX NAME)

RN 770724-03-3 CAPLUS

CN 2(1H)-Pyrimidinethione, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-04-4 CAPLUS

CN Ethanethioic acid, S-[4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl] ester (CA INDEX NAME)

RN 770724-05-5 CAPLUS

CN Pyrimidine, 2-chloro-4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-06-6 CAPLUS

CN 2-Pyrimidinecarbonitrile, 4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-07-7 CAPLUS

CN Pyrimidine, 2-(2H-tetrazol-5-yl)-4-[2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-08-8 CAPLUS

CN Pyrimidine, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-09-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-10-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[5'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $O$ 
 $CF_3$ 

RN 770724-11-3 CAPLUS

CN Pyrimidine, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

## 10/513699

RN 770724-12-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-13-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $CF_3$ 

RN 770724-14-6 CAPLUS

CN 2-Pyrimidinecarboxamide, N-(2-amino-1,1-dimethyl-2-oxoethyl)-4-[2',4'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-15-7 CAPLUS

CN Pyrimidine, 2-methyl-4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-16-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-17-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-phenoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-18-0 CAPLUS

CN Pyrimidine, 4-(2'-chloro[1,1'-biphenyl]-3-yl)-2-methyl- (CA INDEX NAME)

RN 770724-19-1 CAPLUS

CN Pyrimidine, 4-(3'-chloro[1,1'-biphenyl]-3-yl)-2-methyl- (CA INDEX NAME)

RN 770724-20-4 CAPLUS

CN [1,1'-Biphenyl]-2-sulfonamide, N-(1,1-dimethylethyl)-3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-21-5 CAPLUS

CN [1,1'-Biphenyl]-2-sulfonamide, 3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-22-6 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, N-(1,1-dimethylethyl)-3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 770724-23-7 CAPLUS

CN [1,1'-Biphenyl]-2-carboxamide, 3'-(2-methyl-4-pyrimidinyl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ Me & & N & \\ \end{array}$$

RN 770724-24-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1, 1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-25-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[[(1,1-dimethylethyl)amino]carbonyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-26-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-27-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$

$$O$$

$$C1$$

RN 770724-28-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-(2',3'-dichloro[1,1'-biphenyl]-3-yl)-, methyl ester (CA INDEX NAME)

RN 770724-29-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-[[(1,1-dimethylethyl)amino]sulfonyl][1, 1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-30-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-31-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[[(1,1-dimethylethyl)amino]sulfonyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-32-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(aminosulfonyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-33-9 CAPLUS

CN Pyrimidine, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-34-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-35-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(1,1-dimethylethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-36-2 CAPLUS

CN Pyrimidine, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770724-37-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-38-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(cyclopropyloxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$H_2N-C$$

RN 770724-39-5 CAPLUS

CN Pyrimidine, 2-methyl-4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-40-8 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

<12/04/2007>

RN 770724-41-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-42-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-formyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-43-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-44-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-45-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-46-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-chloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-47-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-48-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(2H-tetrazol-5-yl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-49-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',3'-dimethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
  $N$   $OMe$ 

RN 770724-50-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(5'-chloro-2'-methoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{C1} \\ & \text{N} \\ & \text{O} \end{array}$$

RN 770724-51-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-methyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} & \\ & \text{N} & \\ & \text{C-NH}_2 \\ & \text{O} \end{array}$$

RN 770724-52-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-fluoro-2'-methyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $M$ 
 $M$ 
 $M$ 

RN 770724-53-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-(1H-pyrazol-1-yl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-54-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-55-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-chloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-56-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-ethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-57-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-ethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-58-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2'-fluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-59-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',6'-dimethyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Me} \\ & \text{N} \\ & \text{N} \\ & \text{O} \end{array}$$

RN 770724-60-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(1,1-dimethylethyl)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-61-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-62-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-63-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3'-acetyl[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $AC$ 

RN 770724-64-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(hydroxymethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-65-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(4'-cyano[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} \operatorname{NC} & & & \\ & \operatorname{N} & & \\ & \operatorname{C-NH}_2 \\ & & \operatorname{O} \end{array}$$

RN 770724-66-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[3'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $O-CF_3$ 

RN 770724-67-9 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',4'-difluoro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$H_2N-C$$
 $N$ 
 $F$ 

RN 770724-68-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[1,1'-biphenyl]-3-yl- (CA INDEX NAME)

RN 770724-69-1 CAPLUS

CN Methanesulfonamide, N-methyl-N-[3'-(2-methyl-4-pyrimidinyl)-2-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

RN 770724-70-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-[methyl(methylsulfonyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & F_3C-O \\ H_2N-C & N \\ \hline & N-Me \\ \hline & O \\ \hline & S-Me \\ \hline & O \end{array}$$

RN 770724-71-5 CAPLUS

CN Propanamide, 2,2-dimethyl-N-[3'-(2-methyl-4-pyrimidinyl)-2-(trifluoromethoxy)[1,1'-biphenyl]-4-yl]- (CA INDEX NAME)

$$F_3C-O$$
 $NH-C-Bu-t$ 
 $O$ 

RN 770724-72-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4'-[(2,2-dimethyl-1-oxopropyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

770724-73-7 CAPLUS RN

CN 2-Pyrimidinecarboxamide, 4-[4'-[(2,2-dimethyl-1-oxopropyl)amino]-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

$$\begin{array}{c|c} O & F_3C-O \\ H_2N-C & N \\ \hline & NH-C-Bu-t \\ \hline & O \end{array}$$

770724-74-8 CAPLUS RN

Pyrimidine, 2-(2H-tetrazol-5-yl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-CN yl]- (CA INDEX NAME)

RN 770724-75-9 CAPLUS

CN Pyrimidine, 2-(1-methyl-1H-tetrazol-5-yl)-4-[2'-(trifluoromethoxy)[1,1'biphenyl]-3-yl]- (CA INDEX NAME)

RN

770724-76-0 CAPLUS Pyrimidine, 2-(2-methyl-2H-tetrazol-5-yl)-4-[2'-(trifluoromethoxy)[1,1'-CN biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-77-1 CAPLUS

CN Pyrimidine, 2-(1H-1,2,4-triazol-5-yl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-78-2 CAPLUS

CN 2-Pyrimidineacetamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-79-3 CAPLUS

CN 2-Pyrimidineacetonitrile, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-80-6 CAPLUS

CN 2-Pyrimidinesulfonamide, N-(1,1-dimethylethyl)-4-[2'- (trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-81-7 CAPLUS

CN 2-Pyrimidinesulfonamide, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-(CA INDEX NAME)

RN 770724-82-8 CAPLUS

CN 2-Pyrimidinesulfonamide, N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-y1]- (CA INDEX NAME)

RN 770724-83-9 CAPLUS

CN 2-Pyrimidinemethanol, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-84-0 CAPLUS

CN 2-Pyrimidinemethanol,  $\alpha$ -methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-85-1 CAPLUS

CN Acetamide, N-[[4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl]- (CA INDEX NAME)

RN 770724-86-2 CAPLUS

CN Sulfamic acid, [4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-pyrimidinyl]methyl ester (9CI) (CA INDEX NAME)

RN 770724-87-3 CAPLUS

CN 2-Pyrimidinamine, N-methyl-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-88-4 CAPLUS

CN 2-Pyrimidinamine, N-(1-methylethyl)-4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770724-89-5 CAPLUS

CN Pyrimidine, 4-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-[2-(trifluoromethoxy)phenyl]- (CA INDEX NAME)

RN 770724-94-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(3',4',5'-trimethoxy[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

RN 770724-97-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-[(4-oxo-1-piperidinyl)methyl][1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-01-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-02-5 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-03-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-04-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-05-8 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-06-9 CAPLUS

CN Pyrimidine, 2-methyl-4-[4-(phenylmethoxy)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-07-0 CAPLUS

CN [1,1'-Biphenyl]-4-ol, 3-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)-(CA INDEX NAME)

RN 770725-08-1 CAPLUS

CN Acetamide, N-[5-(2-methyl-4-pyrimidinyl)-2'-(trifluoromethoxy)[1,1'-biphenyl]-2-yl]- (CA INDEX NAME)

RN 770725-09-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-10-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(acetylamino)-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-11-6 CAPLUS

CN Pyrimidine, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-12-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-13-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-14-9 CAPLUS

CN Pyrimidine, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl-(CA INDEX NAME)

RN 770725-15-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-16-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-17-2 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-bromo-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-18-3 CAPLUS

CN Pyrimidine, 2-methyl-4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]- (9CI) (CA INDEX NAME)

RN 770725-19-4 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]-, methyl ester (9CI) (CA INDEX NAME)

RN 770725-20-7 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2''-(trifluoromethoxy)[1,1':2',1''-terphenyl]-4'-yl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & & & & \\ H_2N-C & & & \\ & & & \\ O & & & \\ \end{array}$$

RN 770725-21-8 CAPLUS

CN Pyrimidine, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-22-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-23-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-24-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-25-2 CAPLUS

CN Pyrimidine, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-26-3 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-27-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4-chloro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-28-5 CAPLUS

CN Pyrimidine, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-2-methyl- (CA INDEX NAME)

RN 770725-29-6 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]-, methyl ester (CA INDEX NAME)

RN 770725-30-9 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-31-0 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-fluoro-2'-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-32-1 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770725-33-2 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2'-fluoro-6-(2,2,2-trifluoroethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770726-82-4 CAPLUS

CN 2,4-Pyrimidinediamine, 6-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-12-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-amino-6-[2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-13-4 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-fluoro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-14-5 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-chloro-2'-(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-15-6 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-(2',6'-dichloro[1,1'-biphenyl]-3-yl)- (CA INDEX NAME)

$$\begin{array}{c|c} & & & & \\ & N & & & \\ H_2N-C & & N & & \\ & & & & \\ O & & & & \\ \end{array}$$

RN 770727-16-7 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-17-8 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[2',6'-bis(trifluoromethyl)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

RN 770727-18-9 CAPLUS

CN Pyrimidine, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-2,5-dimethyl- (CA INDEX NAME)

RN 770727-19-0 CAPLUS

CN 2-Pyrimidinecarboxylic acid, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl-, methyl ester (CA INDEX NAME)

RN 770727-20-3 CAPLUS

CN 2-Pyrimidinecarboxamide, 4-[4'-fluoro-2'-(trifluoromethoxy)[1,1'-biphenyl]-3-yl]-5-methyl- (CA INDEX NAME)

L29 ANSWER 18 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:739385 CAPLUS

DOCUMENT NUMBER: 141:268179

TITLE: Long-life white-emitting organic electroluminescent

devices, displays, illumination apparatus, and

electric appliances therewith

INVENTOR(S): Fukuda, Mitsuhiro; Genda, Kazuo

PATENT ASSIGNEE(S): Konica Minolta Holdings, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 577 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2004253298	A	20040909	JP 2003-43860	20030221		
PRIORITY APPLN. INFO.:			JP 2003-43860	20030221		
OTHER SOURCE(S):	MARPAT	141:268179				

GΙ

AB The devices have, in their constituent layers (e.g., emitting layers, hole- or electron-transporting layers), (i) compds. represented by X1R1C:CR2X2 [X1, X2 = aryl, heterocycle; R1, R2 = aryl, heterocyclic hydrocarbyl, cycloalkoxy (R1 = R2 = aryl)], R11R12R13R14R15P (R11-R15 = monovalent substituent), Ar2Ar1C6H4(m-Ar1Ar2) [Ar1 = bivalent aromatic hydrocarbylene; Ar2 = (substituted) Ph; H atom on the benzene ring may be substituted with (cyclo)alkyl, alkoxy, or halo], Z(ArQ)n [Q =(substituted) o-(2-pyridyl) phenyl; Z = n-v alent bridging group, single bond; Ar = bivalent arylene; n = 2-8], etc., (ii) fluorescent compds. with mol. weight 500-2000 and atomic ratio F/(F + H) 0-0.9 and having fluorescent peak at ≤415 nm, (iii) polysilanes (R21R22Si)n [R21, R22 = alkyl(oxy), aromatic group, aryloxy; n1 ≥3] or [R31(Ar31NR32R33)Si]n [R31 = alkyl(oxy), aromatic group, aryloxy; R32, R33 = alkyl, aromatic group;  $Ar31 = arylene; n2 \ge 3], and/or (iv) fluorescent compds. satisfying$ atomic ratio N/C 0-0.05. The devices, having phosphorescent dopants I (Z11 = aromatic azacycle; Z12 = nonarom. ring, 5-membered aromatic ring, azulene; M = metal), II (Z21, Z22 = aromatic azacycle; M = metal), or III (Z41 = azacycle; Z42 = ring; M = metal) in emitting layers, are also claimed. The devices exhibit high luminescent efficiency and substantially white emission, and are suited for light source uses, especially of LCD.

IT 650606-89-6

RL: DEV (Device component use); USES (Uses)

(long-life white-emitting organic LED containing azacyclic phosphorescent dopants and showing high luminescent efficiency)

RN

650606-89-6 CAPLUS
Pyrimidine, 2,4,6-tris([1,1':3',1''-terphenyl]-5'-yl)- (9CI) (CA INDEX CN NĀME)

L29 ANSWER 19 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:78016 CAPLUS

DOCUMENT NUMBER: 140:136202

TITLE: Organic electroluminescent device and display

INVENTOR(S): Matsuura, Mitsunobu; Yamada, Taketoshi; Kita, Hiroshi

PATENT ASSIGNEE(S): Konica Minolta Holdings Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 34 pp.

CODEN. TRYVAE

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
JP 2004031004	A	20040129	JP 2002-182682	20020624		
JP 4036041	В2	20080123				
JP 2007335904	A	20071227	JP 2007-233744	20070910		
PRIORITY APPLN. INFO.:			JP 2002-182682 A3	20020624		
OTHER SOURCE(S):	MARPAT	140:136202				
GI						

- AB The invention relates to an organic electroluminescent device, suited for use in making an optical display, comprising a phosphorescent substance-containing host layer as a light-emitting layer, wherein the electron transporting layer or the light-emitting layer contains the compound represented by I [R11-14 = H and monovalent group; at least one of R11-14 is bonded to the pyrimidine skeleton through C, O, S, and Si atoms], and the phosphorescent substance is iridium, osmium and platinum compds.
- IT 650606-89-6 650606-90-9 RL: DEV (Device component use); USES (Uses)

(organic electroluminescent device with phosphorescent light-emitting layer)

- RN 650606-89-6 CAPLUS
- CN Pyrimidine, 2,4,6-tris([1,1':3',1''-terphenyl]-5'-yl)- (9CI) (CA INDEX NAME)

RN 650606-90-9 CAPLUS

CN Pyrimidine, 2,4,6-tris(2,2'',3,3'',4,4'',5,5'',6,6''-decafluoro[1,1':3',1''-terphenyl]-5'-yl)- (9CI) (CA INDEX NAME)

L29 ANSWER 20 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:300895 CAPLUS

DOCUMENT NUMBER: 138:321288

TITLE: Preparation of 2- and 4-aminopyrimidines N-substituted

by a bicyclic ring for use as kinase inhibitors in the

treatment of cancer

INVENTOR(S): Nagarathnam, Dhanapalan; Wang, Chunguang; Chen,

Yuanwei; Yi, Lin; Chen, Jianqing; Weber, Olaf; Boyer, Stephen; Clark, Roger B.; Phillips, Barton; Meahl, Jennifer; Ladouceur, Gaetan; Bi, Cheng; Burke, Michael

J.; Cook, James; Verma, Sharad K.; Fan, Jianmei

PATENT ASSIGNEE(S): Bayer Corporation, USA SOURCE: PCT Int. Appl., 118 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.						KIN	D	DATE			APPL	ICAT		DATE				
	WO	vO 2003030909			A1	A1 20030417			1	WO 2	002-	 US30	20020925					
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,
			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	KΖ,	LC,	LK,	LR,
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PH,	PL,
			PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,
			US,	UZ,	VN,	YU,	ZA,	ZW										
		RW:	GH,	GM,	ΚE,	LS,	MW,	MΖ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,	BY,
			KG,	KΖ,	MD,	RU,	ΤJ,	TM,	ΑT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
			FΙ,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	SK,	TR,	BF,	ВJ,	CF,
			CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	ΝE,	SN,	TD,	ΤG			
	ΑU	2002	3301	8 0		A1		2003	0422		AU 2	002-	3301	20020925				
PRIOF	RITY	Z APP	LN.	INFO	.:					1	US 2	001-	3242	76P	]	P 2	0010	925
										1	US 2	002-	3525	09P	]	P 2	0020	131
										WO 2002-US30616				Ī	₩ 2	0020	925	

OTHER SOURCE(S): MARPAT 138:321288

GΙ

AB The title compds. [I; X = NR1R6, NR4R5, R4, with the proviso that at least one X must be NR1R6; R1 = (un) substituted fused bicyclic unsatd. ring containing 9 or 10 atoms optionally containing 1-4 heteroatoms selected from the

group consisting of N, S and O; R2 = H, halo, alkyl, etc.; R3 = H, alkyl, thio; R4 = (un) substituted -Yn-mono-ring group or -Yn-multi-ring group (each ring containing 4-18 atoms in the ring and optionally containing 1-4 heteroatoms selected from N, S, and O; n = 0-1; Y = alkylenyl, C(CN); R4

can also be hydrogen or alkyl when R5 is present); R5 = (un)substituted –Yn-mono-ring group or –Yn-multi-ring group (each ring containing 4-18 atoms in the ring and optionally containing 1-4 heteroatoms selected from N, S, and O; n = 0-1; Y = alkylenyl, N:CH, N:CHMe; with the proviso that the multi-ring group cannot be benzimidazolyl); R6 = H, alkyl] which are kinase inhibitors useful in the treatment of cancer and viral infections, were prepared and formulated. Thus, heating 6-aminoquinoline with 2,4-dichloro-5-trifluoromethylpyrimidine (preparation given) in the presence of Na2CO3 in BuOH to 120°C for 3 days afforded I [X = 6-quinolinylamino; R2 = CF3; R3 = H] which showed IC50 of 0.48  $\mu$ M in in vitro proliferation inhibition assay (HCT 116 human colorectal carcinoma cells).

IT 511248-79-6P 511249-01-7P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 2- and 4-aminopyrimidines as kinase inhibitors in the treatment of cancer)

RN 511248-79-6 CAPLUS

CN 6-Quinolinamine, N-(4-[1,1'-biphenyl]-3-yl-5-fluoro-2-pyrimidinyl)- (CA INDEX NAME)

RN 511249-01-7 CAPLUS

CN 1H-Indazol-5-amine, N-(4-[1,1'-biphenyl]-3-yl-5-fluoro-2-pyrimidinyl)-1-methyl- (CA INDEX NAME)

7

REFERENCE COUNT:

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 21 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:927396 CAPLUS

DOCUMENT NUMBER: 138:13955

TITLE: Preparation of phenol and hydroxynaphthalene based

inhibitors of protein kinase for the treatment of

disease

INVENTOR(S): Cao, Sheldon Xiaodong; Bounaud, Pierre-Yves; Chen,

> Xiaohua; Chung, Hyun-Ho; Dumas, David Paul; Kc, Sunil Kumar; Min, Changhee; Yang, Jae Young; Long, Mellissa

PATENT ASSIGNEE(S): LG Biomedical Institute, USA

SOURCE: PCT Int. Appl., 286 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	PATENT NO.					KIND DATE				APP:	LICAT		DATE				
					A2 20021205 A3 20040304				WO :	2002-	US16	20020528					
	₩:	CO, GM, LS, PL,	CR, HR, LT, PT,	CU, HU, LU, RO,	CZ, ID, LV, RU,	DE, IL, MA, SD,	DK, IN, MD, SE,	DM, IS, MG, SG,	DZ, JP, MK, SI,	EC KE MN	, BG, , EE, , KG, , MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, OM,	GH, LR, PH,
	RW:	GH, KG, GR,	GM, KZ, IE,	KE, MD, IT,	LS, RU, LU,	MW, TJ, MC,	TM, NL,	SD, AT, PT,	SL, BE, SE,	CH TR	, TZ, , CY, , BF,	DE,	DK,	ES,	FI,	FR,	GB,
					A1	2002	1209	AU 2002-310187 US 2002-158030									
US	20030208067			A1 20031106				US 2002-158103 EP 2002-737248						20020528			
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, IT, , TR						
	2004	0266	57							KR :	2003- 2003- 2001-	7153	88		2	0020 0031 0010	125
OTHER SOURCE(S):				MAR	PAT	138:	1395			2002-					0020	528	

GΙ

$$\begin{array}{c|c}
 & XR6 \\
 & R5 \\
 & R4 \\
 & R2 \\
 & R3 \\
 & I
\end{array}$$

Phenol and hydroxynaphthalene derivs. I [X = 0, S, amine, alkylamine,AB alkynylamine, arylamine, and heteroarylamine; R1 = (un)substituted 5- or 6-membered aromatic or heteroarom. ring, -(X1)mCOX2-, wherein X1 = alkylene, alkenylene, alkynylene, aryl and heteroaryl, X2 = H, alkyl, aryl, heteroaryl, OH, alkoxy, amino, substituted amine, m = 0 or 1, or R1 = -C(X3)=N-NX4-C(=E)-NX5X6 wherein X3=H, alkyl, aryl, alkylaryl, heteroaryl, and amino and E = 0, S, and substituted amine with X4, X5, and X6 independently equal to H, alkyl, aryl, and heteroaryl; R2, R3, and R4 = H, alkyl, alkylene, halo, alkoxy, etc.; or R2 and R3 or R3 and R4 may be taken together to form an (un) substituted aromatic or heteroarom. ring; R5 = H, (un)substituted-alkyl, -aryl, -heterocycle, etc.; R6 = H, alkyl, alkene, alkyne, aryl, and heteroaryl] are prepared and disclosed as inhibitors of protein kinase. Thus, II was prepared by cyclocondensation of 5'-bromo-2'-methoxyacetophenone with N,N-dimethylformamide di-Et acetal with subsequent Suzuki coupling with 4-methoxyphenylboronic acid. In assays to determine cyclin dependent kinase activity, specifically against CDK2 and CDK5, II possessed IC50 values of  $0-0.5 \mu M$ . II proved highly specific for CDK2 and CDK5 and was further evaluated by in vitro tumor cell efficacy tests against numerous cancers. The present invention is directed in part towards methods of modulating the function of protein kinases with phenol- and hydroxynaphthalene-based compds. The methods incorporate cells that express a protein kinase. In addition, the invention describes methods of preventing and treating protein kinase-related abnormal conditions in organisms with a compound identified by the invention. Furthermore, the invention pertains to phenol- and hydroxynaphthalene-based compds. and pharmaceutical compns. comprising these compds.

IT 477726-63-9P

RN

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

477726-63-9 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2-amino-6-chloro-4-pyrimidinyl)- (CA INDEX NAME)

ΙT 477726-56-0P 477726-59-3P 477726-61-7P 477726-62-8P 477726-64-0P 477726-65-1P 477726-66-2P 477726-86-6P 477726-87-7P 477726-88-8P 477726-89-9P 477726-90-2P 477726-91-3P 477726-92-4P 477726-93-5P 477726-94-6P 477726-95-7P 477726-96-8P 477726-97-9P 477726-98-0P 477726-99-1P 477727-00-7P 477727-03-0P 477727-05-2P 477727-06-3P 477727-07-4P 477727-08-5P 477727-09-6P 477727-10-9P 477727-11-0P 477727-12-1P 477727-13-2P 477727-14-3P 477727-15-4P 477727-16-5P 477727-17-6P 477727-18-7P 477727-19-8P 477727-20-1P 477727-21-2P 477727-22-3P 477727-23-4P 477727-24-5P 477727-25-6P 477727-26-7P 477727-27-8P 477727-28-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; preparation of phenol and hydroxynaphthalene based inhibitors of protein kinase)

RN 477726-56-0 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2-amino-6-methyl-4-pyrimidinyl)- (CA INDEX NAME)

RN 477726-59-3 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2-amino-6-methoxy-4-pyrimidinyl)- (CA INDEX NAME)

RN 477726-61-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2,6-diamino-4-pyrimidinyl)- (CA INDEX NAME)

RN 477726-62-8 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2-amino-4-pyrimidinyl)-3'-fluoro- (CA INDEX NAME)

RN 477726-64-0 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(2-hydroxyethyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

HO NH2 NH-
$$\mathrm{CH_2}$$
- $\mathrm{CH_2}$ - $\mathrm{OH}$ 

RN 477726-65-1 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(2,3-dihydroxypropyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & \text{NH}_2 \\ & \text{N} & \text{OH} \\ & \text{NH-} \, \text{CH}_2 - \text{CH-} \, \text{CH}_2 - \text{OH} \\ & \text{OH} \end{array}$$

RN 477726-66-2 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-(2-amino-4-pyrimidinyl)- (CA INDEX NAME)

RN 477726-86-6 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(5-hydroxypentyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-87-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(1-piperazinyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-88-8 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477726-89-9 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(2R)-2-(hydroxymethyl)-1-pyrrolidinyl]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477726-90-2 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(4-morpholinyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-91-3 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[3-(hydroxymethyl)-1-piperidinyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-92-4 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[2-(hydroxymethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-93-5 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[3-(hydroxymethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-94-6 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[4-(hydroxymethyl)phenyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-95-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1R)-1-(hydroxymethyl)-2-phenylethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477726-96-8 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1S)-1-(hydroxymethyl)-2-phenylethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477726-97-9 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(3-nitrophenyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-98-0 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(4-nitrophenyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477726-99-1 CAPLUS
CN [1 1'-Biphenyl]-4 4'-diol 3-[2-ami

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(4-aminophenyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-00-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(3-aminophenyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-03-0 CAPLUS

CN [1,1'-Biphenyl]-4-ol, 3'-amino-3-(2-amino-4-pyrimidinyl)- (CA INDEX NAME)

RN 477727-05-2 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1R)-2-hydroxy-1-(1H-indol-3-ylmethyl)ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-06-3 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1S)-2-hydroxy-1-phenylethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-07-4 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(4-methoxyphenyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-08-5 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1S)-1-(hydroxymethyl)-2-[(phenylmethyl)thio]ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-09-6 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[2-(1H-indol-3-yl)ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

$$CH_2-CH_2-NH$$
 $NH_2$ 
 $NH_2$ 

RN 477727-10-9 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[4-(phenylmethyl)-1-piperazinyl]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-11-0 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1S)-2-hydroxy-1-(1H-indol-3-ylmethyl)ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-12-1 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1S)-1-(hydroxymethyl)-2-methylpropyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-13-2 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(4-methyl-1-piperazinyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-14-3 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[2-(4-morpholinyl)ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

HO 
$$\sim$$
 NH2  $\sim$  NH  $\sim$  NH  $\sim$  CH2  $\sim$  CH2  $\sim$  N

RN 477727-15-4 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[2-(2-pyridinyl)ethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{NH}_2 \\ \text{N} \\ \text{NH} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{N} \\ \end{array}$$

RN 477727-16-5 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(4-thiomorpholinyl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-17-6 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[([1,1'-biphenyl]-2-ylmethyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-18-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(3-chlorophenyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-19-8 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(4-chlorophenyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-20-1 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(3-methoxyphenyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-21-2 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(1R)-2-hydroxy-1-phenylethyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 477727-22-3 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(3-thienyl)-4-pyrimidinyl]- (CA

INDEX NAME)

RN 477727-23-4 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-(1H-indol-5-yl)-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-24-5 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(3-fluorophenyl)methyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-25-6 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(2-fluorophenyl)methyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-26-7 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(3-methoxyphenyl)methyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

RN 477727-27-8 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[[(4-methoxyphenyl)methyl]amino]-4-pyrimidinyl]- (CA INDEX NAME)

$$\begin{array}{c} \text{NH}_2 \\ \text{NH} \\ \text{OH} \end{array}$$

RN 477727-28-9 CAPLUS

CN [1,1'-Biphenyl]-4,4'-diol, 3-[2-amino-6-[(2-fluoro-4-hydroxyphenyl)amino]-4-pyrimidinyl]- (CA INDEX NAME)

IT 477727-42-7P 477727-45-0P 477727-47-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of phenol and hydroxynaphthalene based inhibitors of protein kinase)

RN 477727-42-7 CAPLUS

CN 2-Pyrimidinamine, 4-[4,4'-bis(phenylmethoxy)[1,1'-biphenyl]-3-yl]-6-methyl-(CA INDEX NAME)

RN 477727-45-0 CAPLUS

CN 2-Pyrimidinamine, 4-[4,4'-bis(phenylmethoxy)[1,1'-biphenyl]-3-yl]-6-methoxy- (CA INDEX NAME)

RN 477727-47-2 CAPLUS

CN 2,4-Pyrimidinediamine, 6-[4,4'-bis(phenylmethoxy)[1,1'-biphenyl]-3-yl]- (CA INDEX NAME)

L29 ANSWER 22 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:122964 CAPLUS

DOCUMENT NUMBER: 136:167384

TITLE: Preparation of 4-pyrimidinamines as neuroprotectants.

INVENTOR(S):

Grant, Elfrida R.; Brown, Frank K.; Zivin, Robert
Allan; McMillan, Michael; Zhong, Zhong; Scott,
Malcolm; Reitz, Allen B.; Ross, Tina Morgan

PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA

SOURCE: PCT Int. Appl., 92 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PA:	PATENT NO.						KIND DATE			APP:	LICAT		DATE					
	2002012198 2002012198								WO 2001-US24659						20010806			
		AE, CO, GM, LS, RO,	AG, CR, HR, LT, RU,	AL, CU, HU, LU, SD,	AM, CZ, ID, LV, SE,	AT, DE, IL, MA,	AU, DK, IN, MD,	AZ, DM, IS, MG,	DZ, JP, MK,	EC KE MN	, BG, , EE, , KG, , MW, , TM,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE, LK, PL,	GH, LR, PT,	
	RW:	GH, DE,	DK,	KE, ES,	LS, FI,	FR,	GB,	GR,	ΙE,	IT	, TZ, , LU,	MC,	NL,	PT,	SE,	TR,		
CA	CA 2419030											20010806						
AU	2001		A	2002	0218		AU :	2001-	8112		2	0010	806					
EP	1313713				A2 20030528					EP :	2001-	20010806						
BR	R: 2001	IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL	, IT, , TR 2001-					MC,		
					T 2004022													
	5241				A 20050128													
IN	2003	KN00	137		A		2005	0311		IN :	2003-	KN13	7		2	0030	203	
MX	2003	PA01	226		A 2004			0910		MX :	2003-	PA12	26		2	0030	210	
ZA	ZA 2003001868				А		2004	0625		ZA :	2003-	1868			2	0030	306	
	IORITY APPLN. INFO.:										2000- 2001-	_				0000 0010		
THER SO	HER SOURCE(S):					MARPAT 136:1673												

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AB Pharmaceutical compns. comprising a pharmaceutically acceptable carrier [I; R9 = H, thienyl, furanyl, pyrrolyl, (substituted) Ph, pyridinyl,

ΙT

pyridinyl, naphthyl, benzo[b]thien-2-yl, 2-benzofuranyl, pyrimidinyl, 2,4-bis(methoxyphenyl)-5-pyrimidinyl; R10 = cyanoalkyl, alkylamino, dialkylamino, hydroxyalkylamino, hydroxydialkylamino; R11 = H, alkyl], are claimed. Thus, a mixture of N-(2-aminoethyl)-N'-(6-biphenyl-3-ylpyrimidin-4yl)-N-ethylbenzene-1,4-diamine (preparation given), N-benzoylalanine, diisopropylethylamine, HBTU, and DMF was stirred overnight at room temperature to give N-[1-[2-[4-(6-biphenyl-3-ylpyrimidin-4ylamino)phenyl]ethylamino]ethylcarbamoyl]ethyl]benzamide. Tested compds. in a differentiated P19 cell assay using 3 mM glutamate showed neuroprotectant activity with IC50 = 0.07  $\mu$ M to >1  $\mu$ M. 397850-40-7P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 4-pyrimidinamines as neuroprotectants)

RM397850-40-7 CAPLUS

CN 1,4-Benzenediamine, N-(2-aminoethyl)-N'-(6-[1,1'-biphenyl]-3-yl-4pyrimidinyl)-N-ethyl- (9CI) (CA INDEX NAME)

ΙT 397851-04-6

> RL: PAC (Pharmacological activity); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses) (preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-04-6 CAPLUS

CN Ethanol, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino] - (CA INDEX NAME)

397850-34-9P 397850-35-0P 397850-36-1P ΙT 397850-37-2P 397850-38-3P 397850-39-4P 397850-41-8P 397850-42-9P 397850-43-0P 397850-44-1P 397850-45-2P 397850-46-3P 397850-47-4P 397850-48-5P 397850-49-6P 397850-50-9P 397850-51-0P 397850-52-1P 397850-53-2P 397850-54-3P 397850-55-4P 397850-56-5P 397850-57-6P 397850-58-7P 397850-59-8P 397850-60-1P 397850-61-2P 397850-62-3P 397850-63-4P 397850-64-5P 397850-65-6P 397850-66-7P 397850-67-8P 397850-68-9P 397850-69-0P 397850-70-3P

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397850-71-4P 397850-72-5P 397850-73-6P
     397850-74-7P 397850-75-8P 397850-76-9P
     397850-77-0P 397850-78-1P 397850-79-2P
     397850-80-5P 397850-81-6P 397850-82-7P
     397850-83-8P 397850-84-9P 397850-85-0P
     397850-86-1P 397850-87-2P 397850-88-3P
     397850-89-4P 397850-90-7P 397850-91-8P
     397850-92-9P 397850-93-0P 397850-94-1P
     397850-95-2P 397850-96-3P 397850-97-4P
     397850-98-5P 397850-99-6P 397851-00-2P
     397851-01-3P 397851-02-4P
     RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
     (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
     (Uses)
        (preparation of 4-pyrimidinamines as neuroprotectants)
     397850-34-9 CAPLUS
RM
CN
     Benzamide, N-[2-[[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-
     pyrimidinyl)amino]phenyl]ethylamino]ethyl]amino]-1-methyl-2-oxoethyl]-
     (CA INDEX NAME)
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RN 397850-35-0 CAPLUS

CN

1H-Thieno[3,4-d]imidazole-4-pentanamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]hexahydro-2-oxo-, (3aS,4S,6aR)- (CA INDEX NAME)

PAGE 1-A

Absolute stereochemistry.

PAGE 1-B

RN 397850-36-1 CAPLUS

CN Hexadecanamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- (CA INDEX NAME)

RN 397850-37-2 CAPLUS

CN Butanamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[(1-oxobutyl)amino]ethyl]amino]phenyl]- (CA INDEX NAME)

$$\begin{array}{c|c} & & \text{Et} & \text{O} \\ & & \text{N-CH}_2\text{--}\text{CH}_2\text{--}\text{NH-C--}\text{Pr-r} \\ & & \text{N-CH}_2\text{--}\text{CH}_2\text{---}\text{NH-C--}\text{Pr-r} \\ \end{array}$$

RN 397850-38-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(cyclohexylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

<12/04/2007>

Erich Leese

RN 397850-39-4 CAPLUS

CN Alanine, N-benzoyl-, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl ester (CA INDEX NAME)

RN 397850-41-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-y1-4-pyrimidiny1)-N-[2-(dimethylamino)ethyl]-N-ethyl-(9CI) (CA INDEX NAME)

RN 397850-42-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(3-methoxypropyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Et 
$$N - CH_2 - CH_2 - NH - (CH_2)_3 - OMe$$
 Ph

RN 397850-43-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3-chlorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} \\ | \\ \text{N-CH}_2\text{-CH}_2\text{-NH-CH}_2 \\ \end{array}$$

RN 397850-44-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2,4-dimethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-45-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2-ethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-46-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(propylamino)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-47-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2,5-difluorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-48-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(1R,4aS,10aR)-1,2,3,4,4a,9,10,10a-octahydro-1,4a-dimethyl-7-(1-methylethyl)-1-phenanthrenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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PAGE 1-B

RN 397850-49-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-phenylethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-50-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3,4-dimethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-51-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[3-(diethylamino)propyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-52-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(4-bromo-2-pyridinyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-53-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(dimethylamino)ethyl](phenylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{CH}_2\text{-Ph} \\ \mid & \mid & \mid \\ \text{N-CH}_2\text{-CH}_2\text{-N-CH}_2\text{-CH}_2\text{-NMe}_2 \end{array}$$

RN 397850-54-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-y1-4-pyrimidiny1)-N-[2-[buty1(phenylmethy1)amino]ethy1]-N-ethy1- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} & \text{CH}_2-\text{Ph} \\ & & \\ N-\text{CH}_2-\text{CH}_2-\text{N}-\text{Bu-n} \\ \end{array}$$

RN 397850-55-4 CAPLUS

CN 1,4-Benzenediamine, N-[2-([1,1'-biphenyl]-4-ylamino)ethyl]-N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-56-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-furanylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-57-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(3-iodophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-58-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2,2,2-trifluoroethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-59-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3,4-difluorophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-60-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(2-thienyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-61-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[(3,5-dimethyl-2-pyridinyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-62-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-phenylethyl)(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} & \text{CH}_2\text{-Ph} \\ \mid & \mid \\ \text{N-CH}_2\text{-CH}_2\text{-N-CH}_2\text{-CH}_2\text{-Ph} \\ \end{array}$$

RN 397850-63-4 CAPLUS

CN Acetamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-2-ethoxy-N-(phenylmethyl)- (CA INDEX NAME)

RN 397850-64-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-methoxyphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-65-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(4-bromophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-66-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[[3,5-bis(trifluoromethyl)phenyl]methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-67-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(3-methoxyphenyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

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<sup>─</sup> OMe

RN 397850-68-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-bipheny1]-3-y1-4-pyrimidiny1)-N-ethy1-N-[2-[[(3,4,5-trimethoxypheny1)methy1]amino]ethy1]- (9CI) (CA INDEX NAME)

RN 397850-69-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(4-methoxyphenyl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

Et

N-CH2-CH2-NH-CH2-CH2

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- OMe

RN 397850-70-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[2-(1H-imidazol-4-yl)ethyl]amino]ethyl]- (9CI) (CA INDEX NAME)

 $\begin{array}{c|c} & \text{Et} & \\ & \text{N} & \text{N} \\ & \text{N} - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{CH}_2 - \text{CH}_2 \\ \end{array}$ 

RN 397850-71-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[[2-(trifluoromethyl)phenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

Ph Et F3C N-CH2-CH2-NH-CH2

RN 397850-72-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

Et | N-CH<sub>2</sub>-CH<sub>2</sub>-NH-CH<sub>2</sub>-Ph

RN 397850-73-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(3-methoxyphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} \text{Et} \\ \text{N-} \text{CH}_2\text{-} \text{CH}_2\text{-} \text{NH-} \text{CH}_2 \\ \end{array}$$
 OMe

RN 397850-74-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(3-methylphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} \\ & \text{N-CH}_2\text{-CH}_2\text{-NH-CH}_2 \\ \end{array}$$

RN 397850-75-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(3,5-dimethoxyphenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-76-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[(2-bromophenyl)methyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-77-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(4-bromophenyl)ethyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

PAGE 1-B

\_\_ Br

RN 397850-78-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[[(4-fluorophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-79-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(1-naphthalenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

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RN 397850-80-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-phenoxyethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Et} \\ \mid \\ \text{N-CH}_2\text{-CH}_2\text{-NH-CH}_2\text{-CH}_2\text{-OPh} \\ \\ \text{Ph} \end{array}$$

RN 397850-81-6 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2- [[[4-(trifluoromethyl)phenyl]methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-82-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-(butylamino)ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-83-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[bis(phenylmethyl)amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-84-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(3-pyridinylamino)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-85-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-methylphenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-86-1 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[(2-fluorophenyl)methyl]amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-87-2 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-[[2-(3,4-dimethoxyphenyl)ethyl]amino]ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-88-3 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-[ethyl(phenylmethyl)amino]ethyl]- (9CI) (CA INDEX NAME)

RN 397850-89-4 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(1-pyrrolidinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-90-7 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)

RN 397850-91-8 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(1H-imidazol-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} \\ & \text{N-CH}_2\text{-CH}_2\text{--N-N} \\ \end{array}$$

RN 397850-92-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[2-(3,4-dihydro-2(1H)-isoquinolinyl)ethyl]-N-ethyl- (9CI) (CA INDEX NAME)

RN 397850-93-0 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-ethyl-N-[2-(hexahydro-1H-azepin-1-yl)ethyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & \text{Et} \\ & \text{N-CH}_2\text{-CH}_2\text{--N} \\ \end{array}$$

RN 397850-94-1 CAPLUS

CN 1-Piperazinecarboxylic acid, 4-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-, 1,1-dimethylethyl ester (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & \\ & & \\ N \\ \end{array}$$

RN 397850-95-2 CAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, 2-[[4-[(6-[1,1'-bipheny1]-3-yl-4-pyrimidiny1)amino]pheny1]ethylamino]ethyl ester, (3aS,4S,6aR)- (CA INDEX NAME)

Absolute stereochemistry.

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RN 397850-96-3 CAPLUS

CN Ethanol, 2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylam ino]-, benzoate (ester) (9CI) (CA INDEX NAME)

RN 397850-97-4 CAPLUS

CN Benzeneacetamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- $\alpha$ -chloro- (CA INDEX NAME)

RN 397850-98-5 CAPLUS

CN 3-Pyridinecarboxamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-6-nitro- (CA INDEX NAME)

RN 397850-99-6 CAPLUS

CN [1,1'-Biphenyl]-4-carboxamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]- (CA INDEX NAME)

RN 397851-00-2 CAPLUS

CN Benzamide, N-[2-[[4-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)amino]phenyl]ethylamino]ethyl]-4-butoxy- (CA INDEX NAME)

RN 397851-01-3 CAPLUS

CN Benzamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[[4-(trifluoromethyl)benzoyl]amino]ethyl]amino]phenyl]-4-(trifluoromethyl)-(CA INDEX NAME)

RN 397851-02-4 CAPLUS

CN Benzamide, N-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-[4-[ethyl[2-[(3-fluorobenzoyl)amino]ethyl]amino]phenyl]-3-fluoro- (CA INDEX NAME)

IT 397851-07-9

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-07-9 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N,N-dimethyl-(9CI) (CA INDEX NAME)

IT 397851-03-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 4-pyrimidinamines as neuroprotectants)

RN 397851-03-5 CAPLUS

CN 1,4-Benzenediamine, N'-(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)-N-(2-chloroethyl)-N-ethyl- (9CI) (CA INDEX NAME)

L29 ANSWER 23 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

2001:12404 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 134:71603

TITLE: Preparation of 2-(3-heterocyclylphenoxy-, 3-heterocyclylbenzyl, 3-phenylphenoxy, or

> 3-phenylbenzyl)-3-methoxyacrylic acid derivatives as agrochemical fungicides and intermediates for the

preparation thereof

INVENTOR(S): Sakaguchi, Hiroshi

PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan

SOURCE: PCT Int. Appl., 87 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PA	TENT	NO.			KIN	D	DATE			APPL	ICAT		DATE					
WO	2001	0005	 62		A1 20010104					——— WO 2	000-	JP40	20000622					
	W:	ΑE,	AG,	AL,	AM,	ΑT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,	
		CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,	GM,	HR,	
		HU,	ID,	IL,	IN,	IS,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	
		MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	
		SG,	SI,	SK,	SL,	ΤJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	
		ZW,	AM,	AZ,	BY,	KG,	KΖ,	MD,	RU,	ТJ,	TM							
	RW:	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	ΑT,	BE,	CH,	CY,	
		DE,	DK,	ES,	FΙ,	FR,	GB,	GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	
		CF,	CG,	CI,	CM,	GΑ,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	TG				
JP	JP 2001064237						2001	0313		JP 2	000-	1891	19	20000623				
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THER S	HER SOURCE(S):						MARPAT 134:71603											
т																		

GI

$$\begin{array}{c|c}
 & R^7 \\
 & Me \\
 & CO_2Me \\
 & W-C = CH-OMe \\
 & R^2 \\
 & R^3
\end{array}$$

AΒ Acrylic acid derivs. represented by general formula [I; wherein W is oxygen or CH2; X is CR4 or nitrogen; Y is CR5 or nitrogen; R1, R2 and R3 are each independently hydrogen, halogeno, cyano, nitro, amino, hydroxyl, (un)substituted C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, C3-10 cycloalkyl, C6-10 aryl, heteroaryl, C1-6 alkoxy, phenoxy, heteroaryloxy, C2-6 alkoxycarbonyl, C1-6 alkylthio, or C3-30 trialkylsilyl; and R4, R5, R6, R7 and R8 are each independently hydrogen, halogeno, C1-4 alkyl, C1-4haloalkyl, or C1-4 alkoxy] are prepared Also claimed are plant disease controllers containing the same as the active ingredient, a method for

Ι

controlling plant diseases with the derivs., and a method for preparing I. Thus, Me  $2-(5-\mathrm{iodo}-2-\mathrm{methylphenoxy})-3-\mathrm{methoxy}-2-\mathrm{propenoate}$  200,  $4,4,5,5-\mathrm{tetramethyl}-2-[3-(4-\mathrm{pyrimidyl})\mathrm{phenyl}]-1,3,2-\mathrm{dioxoborane}$  162, K3PO4.H2O 610, [1,1'-bis(diphenylphosphono)ferrocene]dichloropalladium(II)-methylene chloride complex 23, Pd(OAc)2 6 mg, and 3 mL ethylene glycol di-Me ether were mixed and heated with stirring at 83° for 1.5 h to give Me 3-methoxy-2-[2-methyl-5-[3-(4-pyrimidyl)phenyl]phenoxy]-2-propenoate (II). II prevented Pseudocercosporella herpotrichoides in wheat plants by 90% at 500 ppm.

IT 315189-11-8P

RL: ARG (Analytical reagent use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of (3-heterocyclylphenoxy-, 3-heterocyclylbenzyl, phenylphenoxy, or phenylbenzyl)methoxyacrylic acid derivs. as agrochem. fungicides)

RN 315189-11-8 CAPLUS

CN 2-Propenoic acid, 3-methoxy-2-[[4-methyl-3'-(4-pyrimidinyl)[1,1'-biphenyl]-3-yl]oxy]-, methyl ester (CA INDEX NAME)

REFERENCE COUNT:

24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 24 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:117033 CAPLUS

DOCUMENT NUMBER: 132:166238

TITLE: Preparation of triazolone derivatives as fungicides

for plants and intermediate therefor

INVENTOR(S): Manabe, Akio; Kinoshita, Yoshiharu; Sakaguchi,

Hiroshi; Araki, Tomohiro

PATENT ASSIGNEE(S): Sumitomo Chemical Company, Limited, Japan

SOURCE: PCT Int. Appl., 133 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PAT	CENT :	NO.			KIN	D	DATE		APPLICATION NO. DATE										
	WO	 √O 2000007999				A1 2000021			0217		 WO 1	999-		19990803						
		W:	ΑE,	AL,	AM,	AT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BY,	CA,	CH,	CN,	CR,	CU,		
			CZ,	DE,	DK,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,		
			IS,	KE,	KG,	KR,	KΖ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	MD,	MG,	MK,	MN,		
			MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	ТJ,	TM,		
			TR,	TT,	UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZW								
		RW:	GH,	GM,	ΚE,	LS,	MW,	SD,	SL,	SZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	DK,		
			ES,	FΙ,	FR,	GB,	GR,	IE,	ΙΤ,	LU,	MC,	NL,	PT,	SE,	BF,	ВJ,	CF,	CG,		
			CI,	CM,	GA,	GN,	GW,	ML,	MR,	NE,	SN,	TD,	ΤG							
	JP 2000239261					Α		2000	0905	JP 1999-217579						1	9990	730		
	CA 2339270									CA 1999-2339270										
	ΑU	9949	331			A		2000	0228	AU 1999-49331						19990803				
	EP 1103548					A1		2001	0530		EP 1	999-	9332	19990803						
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			ΙE,	SI,	LT,	LV,	FΙ,	RO												
	US 6489487							2002	1203		US 2	001-	7622	42		20010205				
PRIO:	RIORITY APPLN. INFO.:										JP 1	998-	2189	73	1	A 1	9980	803		
											JP 1	998-	3106	72	1	A 1	9981	030		
											JP 1	998-	3708	29	1	A 1	9981	225		
											WO 1	999-	JP41	61	1	W 1	9990	803		

OTHER SOURCE(S): MARPAT 132:166238

GΙ

$$V$$
 $T$ 
 $R^2$ 
 $N$ 
 $N$ 
 $N$ 
 $N$ 
 $Me$ 
 $N$ 

AB Triazolone derivs. represented by formula (I; wherein R1 represents

optionally substituted C1-10 alkyl, C2-10 alkenyl, or C2-10 alkynyl, halo, NO2, cyano, optionally substituted C4-20 cycloalkylalkyl, C5-10 cycloalkenyl, C6-20 cycloalkenylalkyl, C6-10 aryl, C7-20 arylalkyl, C1-9 heteroaryl, or C2-19 heteroarylalkyl, etc.; R2 represents hydrogen or C1-6 alkyl; R3 represents C1-6 alkoxy, C1-6 alkylthio, cyano, halo, vinyl, thenyl, cyclopropyl, or C1-6 alkyl; one of T, U, and V represents CR4, another represents CH or nitrogen, and the remaining one represents CR5 or nitrogen; and W represents CR6 or nitrogen; wherein R4 - R6 = H, halo, C1-6 alkyl, C1-6 alkoxy, C1-6 haloalkyl, C1-6 haloalkoxy, cyano, NO2, C2-6 alkoxycarbonyl, C1-6 alkylthio, or C1-6 haloalkylthio) are prepared Thus, a solution of 1,1-dimethyl-4-(3-phenylbenzyl)semicarbazide in CH2C12 was added dropwise to a solution of triphosgene in CH2C12 under ice-cooling, warmed to room temperature and then heated under reflux for 4 h to give 5-chloro-2-methyl-4-(3-phenylbenzyl)-2,4-dihydro-3H-1,2,4-triazol-3-one. The compound was dissolved in anhydrous MeOH, treated with a solution. of

NaOMe,

and refluxed for 3.5 h to give 5-methoxy-2-methyl-4-(3-phenylbenzyl)-2,4-dihydro-3H-1,2,4-triazol-3-one, which at 500 ppm spray limited the infection of rice seedlings by Piricularia oryzae to  $\leq$ 10% of the plant.

IT 258885-74-4P

RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of triazolone derivs. as fungicides for plants)

RN 258885-74-4 CAPLUS

CN 3H-1,2,4-Triazol-3-one, 2,4-dihydro-5-methoxy-2-methyl-4-[[4-methyl-3'-(4-pyrimidinyl)[1,1'-biphenyl]-3-yl]methyl]- (CA INDEX NAME)

REFERENCE COUNT:

10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 25 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:98347 CAPLUS

DOCUMENT NUMBER: 133:37773

TITLE: Polyamines: agents with macrofilaricidal activity
AUTHOR(S): Kinnamon, K. E.; Engle, R. R.; Poon, B. T.; Ellis, W.

Y.; Mccall, J. W.; Dzimianski, M. T.

CORPORATE SOURCE: Division of Experimental Therapeutics, Walter Reed

Army Institute of Research, Washington, DC,

20307-5100, USA

SOURCE: Annals of Tropical Medicine & Parasitology (1999),

93(8), 851-858

CODEN: ATMPA2; ISSN: 0003-4983

PUBLISHER: Carfax Publishing

DOCUMENT TYPE: Journal LANGUAGE: English

ΔR There is a need for effective macrofilaricidal drugs. The polyamine metabolism of filarial worms has been recognized as a possible target for effective drug action. In an attempt to identify agents that might provide leads in developing an effective macrofilaricide, 78 polyamine compds. were selected from among > 250 000 structures that have been amassed by the Walter Reed Army Institute of Research, in the U.S.A. These thousands of agents have been chosen principally for drug-development programs for other parasitic diseases. The 78 prospective drugs selected were evaluated for their macrofilaricidal activity against Brugia pahangi and Acanthocheilonema viteae, in male Mongolian jirds (Meriones unguiculatus). The animal models using these two parasites were designed to mimic, in so far as possible, human lymphatic filariasis and onchocerciasis, resp. Thirteen of the compds. were found to be active although none of these has been previously reported to be macrofilaricidal. Two were suppressive for B. pahanqi and 11 for A. viteae. These active agents may represent a nucleus around which highly effective drugs can be synthesized.

IT 71525-23-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(polyamines: agents with macrofilaricidal activity)

RN 71525-23-0 CAPLUS

CN 2,4-Pyrimidinediamine, 6-[1,1'-biphenyl]-3-yl-5-(4-phenylbutyl)- (CA INDEX NAME)

$$^{\text{H}_2\text{N}}$$
  $^{\text{N}}$   $^{\text{Ph}}$   $^{\text{CH}_2)}$   $_4$   $^{\text{Ph}}$ 

REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 26 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:295954 CAPLUS

DOCUMENT NUMBER: 131:5238

TITLE: 4-Aryl-2-anilinopyrimidines as corticotropin-releasing

hormone (CRH) antagonists

AUTHOR(S): Cocuzza, Anthony J.; Hobbs, Frank W.; Arnold, Charles

R.; Chidester, Dennis R.; Yarem, Jerry A.; Culp, Steven; Fitzgerald, Lawrence; Gilligan, Paul J.

CORPORATE SOURCE: Chemical and Physical Sciences Department, DuPont

Pharmaceuticals Company, Wilmington, DE, 19880-0500,

USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1999), 9(7),

1057-1062

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

AB A series of 4-aryl-2-(N-ethylanilino) pyrimidines has been synthesized as corticotropin-releasing hormone inhibitors. The effect of substitution on

each aromatic ring on receptor binding was investigated.

IT 225922-79-2P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(2-anilino-4-arylpyrimidines as corticotropin-releasing hormone antagonists)

RN 225922-79-2 CAPLUS

CN 2-Pyrimidinamine, 4-[1,1'-biphenyl]-3-yl-N-[2-bromo-4-(1-methylethyl)phenyl]-N-ethyl-6-methyl- (CA INDEX NAME)

REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L29 ANSWER 27 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

1992:194345 CAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 116:194345

ORIGINAL REFERENCE NO.: 116:32937a,32940a

TITLE: Pyrimidyl-substituted acrylic acid esters

INVENTOR(S): Klausener, Alexander; Knueppel, Peter C.; Dehne, Heinz

Wilhelm; Dutzmann, Stefan

PATENT ASSIGNEE(S): Bayer A.-G., Germany SOURCE: Eur. Pat. Appl., 65 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PAT	CENT N	10.			KINI	)	DATE	AF	PLIC	CATI		DATE			
		47126	-			A1	_	1992		EF	199	91-1	13091		_	19910803
	EP	47126	51			В1		1996	0117							
		R:	BE,	CH,	DE,	DK,	ES,	, FR,	GB,	GR, I	T, 1	LI, I	NL			
	DE	40258	391			A1		1992	0220	DE	199	90-4	02589	1		19900816
	US	52310	97			A		1993	0727	US	199	91-7	39647			19910802
	ES	20820	)57			Т3		1996	0316	ES	199	91-1	13091			19910803
	BR	91034	195			А		1992	0512	BF	199	91-3	495			19910805
	JΡ	04244	1068			А		1992	0901	JE	199	91-2	23648			19910809
	ZA	91064	149			А		1992	0527	ZP	199	91-6	449			19910815
PRIOF	RIT	APPI	_N.	INFO	.:					DE	199	90-4	02589	1	Α	19900816
OTHER	R SC	OURCE (	(S):			CASI	REA	CT 11	6:194	4345;	MARI	PAT	116:1	94345		
~ -																

Ι

GΙ

AB PyXC(:CHR)CO2R1 (Py = pyrimidinyl; R = dialkylamino, alkoxy, aralkoxy; R1 = alkyl; X = O, S, NR2; R2 = H, alkyl, aralkyl, aryl) were prepared for use as fungicides. Thus, 4-chloro-6-(3-methoxyphenyl)pyrimidine was treated with MeNHCH2CO2Me.HCl followed by Me3COCH(NMe2)2 to give the pyrimidine I (R3 = NMe2), which was hydrolyzed with aqueous HCl and treated with Me2SO4 to give I (R3 = OMe). The latter compound was more active against Phytophthora on tomatoes than standard compds.

140117-37-9P 140117-47-1P 140117-99-3P TΤ

> RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of)

140117-37-9 CAPLUS RN

2-Propenoic acid, 2-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)methylamino]-3-CN (dimethylamino) -, methyl ester (CA INDEX NAME)

RN 140117-47-1 CAPLUS

CN 2-Propenoic acid, 2-[(6-[1,1'-biphenyl]-3-yl-4-pyrimidinyl)methylamino]-3-methoxy-, methyl ester (CA INDEX NAME)

RN 140117-99-3 CAPLUS

CN 2-Propenoic acid, 3-(dimethylamino)-2-[[4-(4'-methoxy[1,1'-biphenyl]-3-yl)-2-pyrimidinyl]methylamino]-, methyl ester (CA INDEX NAME)

L29 ANSWER 28 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:586317 CAPLUS

DOCUMENT NUMBER: 93:186317

ORIGINAL REFERENCE NO.: 93:29703a,29706a

TITLE: Heterocyclopolyaromatics. IX. 4,4",6,6"-

Tetraazahexa-m-phenylene and 4,4',4'",4"",6,6',6'",6""-

octaazahexa-m-phenylene

AUTHOR(S): Muke, Bernd; Kauffmann, Thomas

CORPORATE SOURCE: Org. Chem. Inst., Univ. Muenster, Muenster, D-4400,

Fed. Rep. Ger.

SOURCE: Chemische Berichte (1980), 113(8), 2739-48

CODEN: CHBEAM; ISSN: 0009-2940

DOCUMENT TYPE: Journal LANGUAGE: German

OTHER SOURCE(S): CASREACT 93:186317

GΙ

AB Reaction of 1,3-Br2C6H4 with BuLi, then pyrimidine, gave 44% pyrimidine I (R=Br) which reacted with 3-BrC6H4Li to give 65% diphenylpyrimidine II (R1=Br). Lithiating this gave 54% II (R1=Li) which cyclized with CuCl2 to give 11% tetrazahexaphenylene III (X=CH) in an overall yield of 3.2%. Successively treating I (R=Br) with pyrimidine and BuLi gave 16% bispyrimidine IV which was cyclized with LiN(CHMe2)2 to give 1% octazahexaphenylene III (X=N) in an overall yield of 0.13%. In contrast to hexa-m-phenylene, III (X=CH) is planar, because of less Pitzer strain in the outer sphere of III (X=CH). Nitrating III (X=CH) gave its 4'', 4'''', 6', 6''''-tetranitro derivative

IT 75307-73-2P 75307-74-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

III

(preparation of) RN

75307-73-2 CAPLUS
Pyrimidine, 4-(3-chlorophenyl)-6-[3'-(6-phenyl-4-pyrimidinyl)[1,1'-CN biphenyl]-3-yl]- (9CI) (CA INDEX NAME)

75307-74-3 CAPLUS RN

Pyrimidine, 4,4'-[1,1'-biphenyl]-3,3'-diylbis[6-(3-chlorophenyl)- (9CI) CN(CA INDEX NAME)

## 10/513699

L29 ANSWER 29 OF 29 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1980:34951 CAPLUS

DOCUMENT NUMBER: 92:34951
ORIGINAL REFERENCE NO.: 92:5771a,5774a

TITLE: Correlation analysis of pyrimidine folic acid

antagonists as antibacterial agents. I

AUTHOR(S): Coats, Eugene A.; Genther, Clara S.; Smith, Carl C. CORPORATE SOURCE: Coll. Pharm., Univ. Cincinnati, Cincinnati, OH, 45267,

USA

SOURCE: European Journal of Medicinal Chemistry (1979), 14(3),

261-70

CODEN: EJMCA5; ISSN: 0009-4374

DOCUMENT TYPE: Journal LANGUAGE: English

The activities of 175 pyrimidines as inhibitors of Streptococcus faecium, Lactobacillus casei, and Pediococcus cerevisiae are reported. In addition, the mode of action according to the ability of folic acid [59-30-3] or folinic acid [58-05-9] to reverse the inhibitory effect of the pyrimidines was determined The 2,4-diamino substituent pattern appeared to be the dominant but not the sole factor controlling mode of action. Quant. structure-activity relations using regression anal., substituent consts., and indicator variables were developed in an effort to delineate influences on potency and to quant. differences between the test systems. Although aromatic and(or) lipophilic substituents at the 5 position of 2,4-diaminopyrimidines enhanced folate reversible inhibition against all 3 systems the derived equations quant. establish differences in and limitations on the extent of this effect.

IT 71525-23-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

(bactericidal activity of, structure in relation to)

RN 71525-23-0 CAPLUS

CN 2,4-Pyrimidinediamine, 6-[1,1'-biphenyl]-3-yl-5-(4-phenylbutyl)- (CA INDEX NAME)

## 10/513699

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=>
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---Logging off of STN---

Connection closed by remote host  $\mathtt{END}$ 

Unable to generate the STN prompt. Exiting the script...